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**NAVAL
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MONTEREY, CALIFORNIA

THESIS

**ARE WE TRACKING THE DRAGON?
ENSURING THE INTELLIGENCE COMMUNITY IS
PROPERLY POSTURED TO MONITOR AN EMERGING
CHINA**

by

Kevin M. Wenks

March 2008

Thesis Co-Advisors:

Alice L. Miller
Timothy J. Doorey

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REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE March 2008	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE Are We Tracking the Dragon? Ensuring the Intelligence Community is Properly Postured to Monitor an Emerging China		5. FUNDING NUMBERS	
6. AUTHOR(S) Kevin M. Wenks		8. PERFORMING ORGANIZATION REPORT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.	
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited		12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) American decision-makers all agree that China's economic, military and diplomatic rise will shape the geopolitical landscape and affect U.S. interests for decades to come. Beyond that broad consensus, visions of China's rise range from optimistic to alarmist. With so much at stake, the U.S. Government needs the expertise, organization, focus and tools to better understand China and the impact of its rise on U.S. national interests. A broad survey of China's economic, military and diplomatic rise over the past decades shows that none of these areas stands in isolation and that their complex interplay drives China's intentions and capabilities. Assessing China from the Intelligence Community's perspective of stove-piped and isolated military, economic or political niches provides an incomplete, if not misleading, picture. This calls for an Intelligence Community (IC) focus quite different from the one that grew up during the Cold War, legacies of which still haunt today's reform efforts. Viewing current IC reform through the prisms of organization, doctrine and technology, this thesis shows which steps are headed in the right direction, and where there remains room for improvement.			
14. SUBJECT TERMS China; Intelligence Reform; Intelligence Community (IC); Director of National Intelligence (DNI)		15. NUMBER OF PAGES 113	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

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**ARE WE TRACKING THE DRAGON?
ENSURING THE INTELLIGENCE COMMUNITY IS PROPERLY POSTURED
TO MONITOR AN EMERGING CHINA**

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Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(FAR EAST, SOUTHEAST ASIA, PACIFIC)**

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ABSTRACT

American decision-makers all agree that China's economic, military and diplomatic rise will shape the geopolitical landscape and affect U.S. interests for decades to come. Beyond that broad consensus, visions of China's rise range from optimistic to alarmist. With so much at stake, the U.S. Government needs the expertise, organization, focus and tools to better understand China and the impact of its rise on U.S. national interests. A broad survey of China's economic, military and diplomatic rise over the past decades shows that none of these areas stands in isolation and that their complex interplay drives China's intentions and capabilities. Assessing China from the Intelligence Community's perspective of stove-piped and isolated military, economic or political niches provides an incomplete, if not misleading, picture. This calls for an Intelligence Community (IC) focus quite different from the one that grew up during the Cold War, legacies of which still haunt today's reform efforts. Viewing current IC reform through the prisms of organization, doctrine and technology, this thesis shows which steps are headed in the right direction, and where there remains room for improvement.

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ACKNOWLEDGMENTS

For my loving, patient and inspirational wife, Christina, who kept the family running while I studied.

For Caroline and Tyler, who helped make this year so special. It was much more fun watching you learn and grow than it was to do the same myself.

For my parents, James and Cathlene, who got me started down this road in the first place.

I also owe a debt of gratitude to Dr. Gregory Treverton, whose insightful lectures and discussions at the Naval Postgraduate School sparked my interest and clarified my thoughts on Intelligence Community reform.

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I. ARE WE READY FOR THE RISE OF CHINA?

A. PURPOSE/RESEARCH QUESTION

It is clear by any measure that China has been on the rise over the past three decades. There is major debate underway in the United States about the nature of China's rise, whether it presents a threat to U.S. interests or an opportunity. This debate will help shape U.S. foreign policy so an accurate reading and understanding of China's rise is important. This thesis examines whether the American intelligence community (IC) is properly organized to coherently assess the multi-faceted and dynamic nature and implications of China's rise. Can the IC, often characterized as dominated by hierarchical, stovepiped bureaucracies, adapt and be nimble and comprehensive enough to manage such a fluid and complex issue?

B. IMPORTANCE

The importance of China's rise to U.S. national security is evident. With one-fifth of the world's population struggling to determine its new place in the world backed by surging economic power and growing military might and diplomatic influence, China may be poised to challenge U.S. dominance in Asia and interests throughout the world. The economic, military, diplomatic, resource availability, environmental and humanitarian consequences of China's rise will substantially impact U.S. interests. At the same time, there are many troubling developments in China that could lead to instability and disorder, with equally unsettling consequences for U.S. interests. How the United States responds to China's rise will be determined in large part by how well the United States understands this rise and its implications.

There are many elements that inform U.S. foreign policy: the press, public opinion, lobbyists and even local politics may affect the way foreign policy issues are conceptualized within the U.S. Government. The U.S. intelligence community is of central importance to policy-makers' understanding of important foreign policy issues. As former Representative Lee Hamilton stated,

Good intelligence is essential to our national security. A superpower like the United States simply cannot survive without it. Policymakers simply must be able to trust that they have the best possible intelligence as they deal with these new threats. Good intelligence does not guarantee good policy, but poor intelligence can ensure bad policy. If a policymaker has quality intelligence, issues are framed; decisions are clearer; and consequences can be anticipated.¹

An issue as important to U.S. national security as the rise of China demands an IC that is properly organized to survey vast amounts of disparate data from multiple disciplines and accurately “connect the dots” to depict the current state of affairs and reduce uncertainty about the future.

The IC’s main components are wedded to certain bureaucratic perspectives (e.g. the Central Intelligence Agency, the State Department’s Bureau of Intelligence and Research or the Defense Department’s Defense Intelligence Agency) or to particular collection technologies (e.g. imagery or signals collection). This provides little agility or comprehensive breadth for addressing dynamic, multi-faceted issues. The Central Intelligence Agency (CIA) was created shortly following World War Two as an independent organization to offer unbiased advice, so that “no one department could unduly influence the type of intelligence produced.”² However, the CIA by many accounts has since then become part of the bureaucratic problem. As former NSA Director William Odom points out, its analytical arm “has become too large and bureaucratic to perform innovative and insightful analysis” precisely at a time when “innovative and insightful analysis” is in great demand.³ Despite the changes brought by the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA), the IC’s basic structure remains little changed from its establishment with the National Security Act of

¹ Lee Hamilton, “Challenges for Intelligence in American Democracy,” Remarks at the International Spy Museum Exhibit, May 5, 2004, http://www.wilsoncenter.org/about/director/docs/Hamilton_intelamerdem.doc, accessed May 14, 2007.

² Sidney Souers to Clark M. Clifford, “Central Intelligence Agency,” 27 December 1945, reprinted in Department of State, *Foreign Relations of the United States, 1945–1950, Emergence of the Intelligence Establishment* (Washington, DC: Government Printing Office, 1996): 158.

³ William Odom, *Fixing Intelligence* (New Haven, CT: Yale University Press, 2004): 67.

1947, and so it is worth investigating whether new opportunities and threats, such as those posed by China's rise, require a dramatically new structure.

C. LITERATURE REVIEW

A significant body of literature has focused on the military and security threat that China poses to U.S. interests.⁴ The general argument is that China is using its new economic power to build its military capabilities and that it will use those military capabilities to challenge U.S. interests in Asia. The arguments are based on a realist analysis of the destabilizing effects of rising and declining powers. An extreme example of the "China threat" school comes from journalist Robert Kaplan who declares in the *Atlantic Monthly* that, "The American military contest with China in the Pacific will define the 21st century."⁵ While some in this school focus on the military aspects of China's rise, others point to China's growing diplomatic activism as a challenge to U.S. national security interests.⁶

A contending line of thought, which may be called the "China partner" school, sees China's rise not as a threat, but more as an opportunity. The adherents of this school generally focus on the economic and diplomatic aspects of China's rise. The China partner school sees China becoming more integrated into the world economy, which will

⁴ See Richard Bernstein and Ross Munro, "China I: The Coming Conflict with America," *Foreign Affairs*, Vol.72 No.2 (March-April 1997):18-32; Robert Kaplan, "How We Would Fight China," *The Atlantic Monthly* (June 2005): 49-64; Aaron L. Friedberg, "11 September and the Future of Sino-American Relations," *Survival*, Vol. 44, No.1 (Spring 2002): 33-50; David Shambaugh, "China's Military Views the World," *International Security*, Vol.26 No.3 (Winter 1999-2000): 104-132; Thomas J. Christensen, "Posing Problems Without Catching up: China's Rise and Challenges for U.S. Security Policy" *International Security*, Vol. 25, No. 4 (Spring, 2001): 5-40.

⁵ Kaplan, 49.

⁶ Phillip Saunders, *China's Global Activism* (Washington, DC, National Defense University Press), 2006; Gideon Rachman, "The Hard Evidence That China's Soft Power Policy is Working," *Financial Times*, February 20, 2007.

make China more interdependent on its trading partners and as a result less of a threat.⁷ Thomas Moore and Yong Deng argued in *The Washington Quarterly* that “Chinese leadership, sensitive to foreign reactions to China’s growing power, has actively pursued cooperative security, win-win economic cooperation, and an increasingly multilateral approach to foreign policy in general.”⁸ The Chinese government itself has taken steps to promote this image in foreign policy circles.⁹

A third school of thought points to disconcerting seeds of instability and stagnation that are embedded in China’s governmental and societal frameworks that make China’s continuing ascent less than assured.¹⁰ The “China in trouble” school points to a darker future of instability and chaos marked by environmental degradation, massive population migrations and widespread political and social unrest. The potential for China to lash out militarily or politically to stave off impending disorder at home harbors dangerous implications for U.S. national security.

Elements of the “China threat” school have been reflected in official U.S. Government statements, such as the 2006 Quadrennial Defense Review which states that “China has the greatest potential to compete militarily with the United States...the pace

⁷ See Evan Medeiros and Taylor Fravel, “China’s New Diplomacy,” *Foreign Affairs*, Vol. 82, No. 6 (November-December 2003): 22-35; Robert Ross, “China II: Beijing as a Conservative Power,” *Foreign Affairs*, Vol. 76 No.2 (March-April 1997): 33-44; David Zweig and Bi Jianhai, “China’s Global Hunt for Energy,” *Foreign Affairs*, Vol 84, No 5, (September-October 2005), 25-38; Avery Goldstein, “The Diplomatic Face of China’s Grand Strategy: A Rising Power’s Emerging Choice,” *The China Quarterly*, No. 168. (December, 2001): 835-864; Adam Segal, “Practical Engagement: Drawing a Fine Line for U.S.-China Trade,” *The Washington Quarterly* Vol. 27, No. 3, (2004): 157-173; Yong Deng and Thomas G. Moore, “China Views Globalization: Toward a New Great-Power Politics?” *The Washington Quarterly* Vol. 27, No. 3 (2004): 117-136; Joshua Kurlantzick, *China’s Charm: Implications of Chinese Soft Power* (Washington, DC, Carnegie Endowment for International Peace), June 2006.

⁸ Deng and Moore, 118.

⁹ See Zheng Bijian, “China’s ‘Peaceful Rise’ to Great Power Status,” *Foreign Affairs*, Vol 84, No. 5 (September-October 2005): 18-24, for a typical article published by foreign policy think tanks in China.

¹⁰ Elizabeth C. Economy, *The River Runs Black* (New York: Cornell University Press, 2004); Chen Guidi and Wu Chuntao, *Will The Boat Sink the Water? The Life of China’s Peasants* (New York: Public Affairs, 2006); Teresa Wright, “Disincentives for Democratic Change in China,” *Asia Pacific Issues*, 82 (February 2007); Minxin Pei, “China’s Changing of the Guard: Contradictory Trends and Confusing Signals,” *Journal of Democracy*, Vol. 14 No. 1 (January 2003) and “China is Stagnating In Its ‘Trapped Transition,’” *Financial Times*, February 24, 2006; Mary Gallagher, “Reform and Openness: Why China’s Economic Reforms Have Delayed Democracy,” *World Politics*, 54 (April 2002), 338-372; Xiaobo Lu, “Booty Socialism, Bureau-preneurs, and the State in Transition: Organizational Corruption in China,” *Comparative Politics*, Vol. 32 No. 3 (2000), 273-294.

and scope of China's military build-up already puts regional military balances at risk."¹¹ This interpretation is likely to lead to a containment-like strategy to limit China's ability to challenge the security interests of the United States.

However, the China partner school is also reflected in the thinking of U.S. policy makers, as evidenced in remarks by then-Deputy Secretary of State Robert Zoellick's remarks in September 2005:

Today, from the United Nations to the World Trade Organization, from agreements on ozone depletion to pacts on nuclear weapons, China is a player at the table...Chinese leaders have decided that their success depends on being networked with the modern world...China does not want a conflict with the United States.¹²

This view of China is likely to lead to policies of engagement towards China. The China in trouble school also tends to favor engagement as a means of assisting China in overcoming its inherent weaknesses and avoiding catastrophic failure.

Having contradictory policies towards China may send Beijing mixed signals and strain an already delicate relationship. Military, diplomatic and economic containment may push away a China that is open to engagement. Alternatively, Chinese leaders may see engagement as tacit appeasement of aggressive military and economic policies and repressive human rights policies, encouraging more of the same. Engagement may also enable China to overcome its difficulties, allowing it become even more of an economic, military and diplomatic challenge. Failure to assess the nature and implications of China's rise accurately will likely result in a schizophrenic foreign policy as competing camps try to assert their divergent views. A coherent and accurate picture of China must be developed if there is to be any chance for a coherent foreign policy regarding China.

D. METHODOLOGY AND SOURCES

This policy analysis will assess the degree to which the IC is properly organized to adequately address these debates. Can the IC accurately assess the multi-dimensional

¹¹ U.S. Department of Defense, "2006 Quadrennial Defense Review Report," February 6, 2006, 29.

¹² Robert Zoellick, "Wither China: From Membership to Responsibility", Remarks to the National Committee on US-China Relations, September 21, 2005, New York, NY.

aspects of China's rise? Is the existing structure for looking at China too stove-piped to provide a coherent picture? This thesis provides a policy analysis of whether the IC, as the primary instrument for developing a coherent picture of China's prospects, is up to the task.

The analysis begins with a wide-ranging exploration of China's rise. It focuses on three key areas of China's new international prominence--economic, military and diplomatic--and how each presents contradictions that complicate analysis. While China's economic growth is serving as the economic engine of Asia and lifting millions out of poverty, it is also producing environmental degradation and it has unleashed restless migrant populations and an empowered middle class, all of which can be destabilizing political influences. China's growing military power may be able to offset key U.S. military capabilities, but its modernization efforts are beset with difficulties and its defense posture lacks transparency, leaving the true threat picture cloudy. China's engagement and use of soft power have fostered stability in Asia and opened doors for cooperation, while at the same time giving China new avenues for supporting unsavory regimes, exporting its development model of economic opening without political freedoms, and undermining the United States diplomatically in regional affairs.

This broad look at China is not intended to resolve the debate about the meaning of China's rise for American foreign policy. Rather, it makes clear that at present China's rise presents the United States and the IC with more complex issues than probably any other nation in the world. Almost every element of China's national power contains intriguing paradoxes that make analytical assessment difficult. The broad array of relevant resources that need to be tapped may require an IC that is considerably different than the one that grew up during the Cold War. The keys needed to address China today are collaboration within and outside of the IC and the willingness and ability to tap and fully exploit open sources of information.

Turning to the IC, this analysis then provides an overview of six decades of intelligence reform efforts to identify certain consistent themes. These reform efforts were generally spurred by intelligence failures and by the IC's inability to change with the times, correctly identify and characterize impending threats, and communicate those

threats to policy-makers. The common themes throughout the reform efforts include the tug-of-war between centralization and decentralization, the all-too-common gap between having the responsibility to perform a mission and lacking the authority to carry it out effectively, getting the right people in the right place with the right tools to get the job done, and bureaucratic inertia that often stifles collaboration, creativity and reform.

This thesis then analyzes the IC's current activities in light of historical trends, viewing current reform efforts through the prisms of organization, doctrine and technology. Many argue that the previously-cited historically-consistent themes still hamper the IC's ability to conduct analysis. The IC is still hierarchical and organized around bureaucracies and collection disciplines, making it ill-suited to address the dynamic, non-traditional, multi-faceted issues presented by China's rise. Former 9/11 Commission member John Lehman stated that despite the recent reforms the IC's current structure "doesn't give anybody line authority over anything. You just have meetings and studies that focus on the process rather than the product."¹³ Tackling the challenge of China's rise with the stove-piped bureaucracy of the traditional IC is unlikely to produce promising results for policymakers. This review shows that in order to accurately assess China, the IC needs an organizational construct, doctrine and technology that are best-suited to operating in a dynamic, multi-faceted environment and that can adequately coalesce and synthesize disparate and often conflicting data into a coherent picture.

Many of the IC reforms to date have been technological, with some organizational tinkering, but more must be done in the organizational and doctrinal realms to effect true transformation. This policy analysis attempts to identify the IC's best option for organizing itself to address the rise of China effectively, based on the deficiencies documented by previous studies. It also identifies the trade-offs and institutional changes that must be made if that option is pursued. By expanding on the current reform efforts and addressing more fundamental cultural and organizational issues, the IC will be better poised to provide policymakers across the board with the insight they need to develop the policies that will benefit U.S. interests.

¹³ Helen Fessenden, "The Limits of Intelligence Reform," *Foreign Affairs*, Vol. 84, No. 6 (November-December 2005): 106.

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II. CHARACTERIZING CHINA AS AN INTELLIGENCE TARGET

A. DEFINING INTELLIGENCE TARGETS

In order to assess the IC's ability to provide cogent analysis on China's rise and its implications for the United States, it is important to understand what type of intelligence target China presents. If the IC was organizationally designed to provide analysis on one type of target, but China presents a different type of target and different requirements for analysis, a new organizational design may be required.

Gregory Treverton and Joseph Nye characterized intelligence issues as either puzzles or mysteries during their time on the National Intelligence Council.¹⁴ Puzzles are questions that have definitive answers, even if those answers are secret and must be discovered. They are truths waiting to be discovered through the hard work of uncovering and gathering secrets, piecing them together to create enough of a picture to understand the truth. Some person, or some factory, or some unit did something, or produced something or has created a specific capability, something that can be identified. For example, puzzles include how many missiles does a given country have? What are those missiles' capabilities? What is that nation's doctrine for employing those missiles?

Mysteries are questions that nobody can answer with certainty, but insightful analysis of the available information may illuminate probabilities or likelihoods and reduce uncertainty. Mysteries do not have certain, specific answers because the outcome will be the end product of many forces working together. For example, mysteries include the question of whether two particular nations will go to war. Will one nation's economy collapse? What will be the effects of demographic shifts within a particular region?

¹⁴ Gregory Treverton, *Reshaping National Intelligence in an age of Information* (Cambridge, UK, Cambridge University Press, 2001): 8-13; and Joseph S. Nye, Jr., "Peering into the Future," *Foreign Affairs*, Vol. 77 No. 4 (July/August 1994): 82-93.

As Treverton states, “the Cold War legacy of intelligence was a vast capacity to solve strategic puzzles...with a high secrets content.”¹⁵ He explains that the IC’s work against the Soviet Union was primarily focused on deciphering or stealing secret information in order to solve the puzzles of Soviet capabilities and intentions. Mysteries were certainly important, but the major focus was on the puzzles of Soviet behavior and capabilities. The closed nature of the Soviet economy and military prevented direct analysis of their size and strength, so they had to be inferred by piecing together tidbits of information from a few open sources such as Soviet government statistics. But there was much more reliance on secret sources, such as satellite photos of Soviet factories and military bases.

The IC’s structure was geared towards gathering secrets to answer these puzzles. Each agency could narrowly focus on its expertise in collection or subject matter to ferret out important secrets and piece them together to answer its part of the puzzle. There was little impetus towards collaboration. The need to keep secrets made the restriction of information based on the “need to know” the primary modus operandi. As Treverton explains,

Collecting secrets was and is crucial to solving foreign policy puzzles. Indeed the special franchise conferred by secrets is at the root of why U.S. intelligence made puzzle solving its principal Cold War business....For the mysteries...information collected secretly may be helpful, but it is seldom as critical as it was to solving Cold War puzzles. Then, information was scarce; now it is overwhelming.¹⁶

Under the imperative to focus on technical expertise to gather secrets and a policy of “need to know” to protect valuable sources and methods, the stove-piped bureaucratic structure of the Cold War IC made sense.

Nye points out that may no longer be the case, “Yet another complication for estimators after the Cold War is the increase in the ratio of mysteries to secrets in the

¹⁵ Treverton, 11.

¹⁶ Treverton, 11-12.

questions that policymakers want answered.”¹⁷ He also argues that the shift from puzzles to mysteries places new demands on the IC and calls for a different approach.

As for the problem that there is now a greater proportion of mysteries to secrets in estimative questions, the solution lies in paying more attention to outside and open sources of information. A high proportion of the information needed to analyze Cold War subjects involved secrets that had to be clandestinely collected, while open sources provided little help. This is still true today for many closed societies such as Iraq [in 1994] or North Korea. But on many key issues, clandestine sources may provide only a small, though still useful, proportion. Open sources provide context.¹⁸

If the IC’s current structure was driven in part by the type of target it faced, it is logical to investigate whether new targets require new structures. What kind of target does China’s rise present to intelligence analysts? As China is a nuclear-armed, communist-led power, is understanding China more akin to the solving the secret-laden puzzles of the Cold War? Should secrets still take pride of place in the IC’s efforts to understand China? Can the answers be achieved with each component of the IC working to solve its particular piece of the puzzle? Conversely, does China present more of a mystery, with a heavy demand for open information to provide insight? Properly placing China on the spectrum between puzzles and mysteries will help guide efforts to identify the optimum structure to address China’s challenges, capabilities and intentions.

The next few pages examine key pillars of China’s growing economic, military and diplomatic power. They identify strengths and capabilities but also systemic weaknesses. They illuminate contradictions that complicate analysis. They also characterize the extent to which China as an intelligence target is more of a mystery or a puzzle and the relative importance of secrets versus open information.

B. ECONOMIC POWER

It is without debate that China has risen rapidly to become a global economic juggernaut. Since Deng Xiaoping initiated economic reforms in 1979, China’s economy

¹⁷ Nye, 87-88.

¹⁸ Ibid., 90-91.

has grown at an average annual rate of 9.7 percent. That growth may have even accelerated recently, with growth in 2006 measured at 11.1 percent, and growth in the first half of 2007 clocking in at 11.5 percent over the same period in 2006. Exports grew by 29 percent in the first six months of 2007, and imports grew by 18.3 percent. Total Chinese trade doubled between 2003 to 2006. China has become the world's second largest economy by purchasing power parity standards, and is on track to surpass the United States as the world's second largest merchandise exporter in 2007.¹⁹ The list of staggering economic achievements goes on, but it is clear to all observers that China's economy is booming and has made China once again an important player on the world stage.

Despite the unanimity of opinion on how big China's economy has become, debates rage on where China is headed, politically and economically. Will China follow the pattern of its northeast Asian neighbors of South Korea and Taiwan, where economic growth led to political opening and democracy? Will the Chinese Communist Party (CCP) exploit the new economic tools available to it and continue to cling to power? Will China's economic growth continue unabated, with China becoming the world's biggest economy over the next decade or so? Has China's growth unleashed so many damaging side effects such as environmental degradation, rising inequality and social dissatisfaction that its future growth is imperiled?

As Minxin Pei, the director of the China Program at the Carnegie Endowment for International Peace notes, "Assessing China's adoption of capitalism and predicting its future have become enormously daunting." China's rise is replete with paradoxes that challenge prediction as its "transition has at once closely followed and starkly defied world economic and political trends."²⁰ This section identifies some of the challenges China faces in continuing its economic growth and some of the obstacles it faces in

¹⁹ Wayne Morrison, "China's Economic Conditions," *CRS Report for Congress RL33534*, Washington, DC: Library of Congress, August 9, 2007, 1-2.

²⁰ Minxin Pei, "China's Changing of the Guard: Contradictory Trends and Confusing Signals," *Journal of Democracy*, Vol. 14 No. 1 (January 2003), 73.

addressing those challenges. By identifying the problems facing China, this section highlights the complex issues the IC must address when assessing China's future and its impact on the United States.

1. Impetus for Economic Reform

The CCP jettisoned many aspects of ideologically-derived government command of the economy and introduced economic reforms that started China on a path towards a market economy with access to Western technology and capital. China's reforms did not begin with a master plan and a pre-determined end point. It began with a few tentative steps, followed by more reforms that were in reaction to the consequences of the previous reforms. It has been characterized as a "learning-by-doing approach" as China's leaders felt their way along.²¹

The time pressure on the CCP to grow China's economy is immense. Barry Naughton credits the CCP's onerous one-child policy with inadvertently creating "an exceptional demographic window of opportunity for growth during the reform era."²² This may not have been the intended consequence at the time the policy was implemented, but it created a large pool of young, low-dependency workers needed to fuel China's manufacturing and exporting explosion. The policy carries future dangers for China, however, as China faces a demographic crisis beginning around 2025, when supporting a rapidly aging population will place an increasing burden on the government and the workforce. As the last of the "baby boom echo" born in the late 1980s enters the job market, the second economic effect of the one-child policy will kick in, and the growth of the labor force will reach zero. At the same time, the number of Chinese who are 60 years or older will increase from 128 million in 2000 to 350 million in 2030.²³ As we see in Japan and other industrialized nations, fewer workers will have to support more elderly. China is at a huge disadvantage compared to other aging nations because it has

²¹ Pei, 73.

²² Barry Naughton, *The Chinese Economy: Transitions and Growth* (Cambridge, MA: MIT Press, 2007), 177.

²³ Naughton, 174.

not yet grown rich enough to put in a working social security safety net. Essentially, China must grow rich quickly before it grows old, or the financial consequences can be disastrous. The imperative to start economic reforms was strong, and the pressures on China to continue growing its economy are immense.

Throughout the different phases of economic reforms, some trends have remained constant. There has been a consistent decentralization of economic involvement by the state, starting with family farms and progressing up through the State Owned Enterprises (SOEs). As a corollary, local entrepreneurship has been emphasized. There has also been a growing application of market forces, and the competition that comes with them. Kenneth Lieberthal, the director for China at the University of Michigan's William Davidson Institute, explains that reforms "concentrated especially on increasing incentives for territorial leaders to take the initiative in producing rapid local growth and in motivating SOE managers to increase output and improve efficiency."²⁴

Along with the economic reforms, there has also been a thorough effort to resist and prevent political reforms that would weaken or threaten the CCP's hold on power. Pei states that, "The leadership's commitment to one-party rule and its antipathy toward democracy has meanwhile been notable for its explicitness, but also for its ferocity."²⁵ The effort to unleash competitive market forces without efforts to provide the political tools to temper them has produced disastrous results that take the rosy glow off of China's impressive economic accomplishments. These problems include a growing income gap regionally and across society, a massive migration of workers from the country to the cities, and environmental damage that is making large portions of the nation uninhabitable. This section focuses on the environmental effects of China's economic reforms because the political, economic and social factors at play in China's environmental problems highlight the complexities and contradictions that complicate analysis of where China's economy and society is headed. The very forces driving China's economic growth are also driving China's environmental deterioration.

²⁴ Kenneth Lieberthal, *Governing China: From Revolution Through Reform*, (New York: W.W. Norton, 2004), 248.

²⁵ Pei, 74.

2. Environmental Degradation

The dire condition of China's environment has received much attention lately. It is widely recognized as being one of the biggest consequences of China's rush to economic strength. Industrial economic development inevitably leads to consumption of natural resources, but the manner of China's development has led to particularly frightful environmental damage. China uses coal to provide 70 percent of its electricity, burning more coal in 2006 than the United States, Japan and the United Kingdom combined. Chinese coal tends to have a high sulfur content, adding to the environmental damage. Air pollution is compounded by China's growing use of cars. China produces 14,000 new cars a day and is expected to have more cars than the United States by as early as 2040. This has contributed to China having 16 of the world's 20 most polluted cities. Beijing now experiences six times the level of airborne particulates as New York City.²⁶

China's rapid urbanization is taxing the environment as well. China plans to move 400 million people to newly-developed urban centers between 2000 and 2030. This is more than the entire population of the United States and will demand the construction of half of all of the buildings expected to be built in the world during that period.²⁷ What makes this especially worrisome is that China's poor construction standards and inefficient appliances result in the consumption of 50 to 100 percent more energy per square foot than industrialized nations with a similar climate.²⁸ This will only increase the demand for energy, most of which will still be produced by coal.

Water use and quality are another growing concern. Agriculture uses 66 percent of China's water, and half of that is wasted. Twenty percent of water used in cities is wasted through leaky pipes. A survey in 2005 found that only 23 percent of factories treated sewage before releasing it. The Xinhua News Agency reported that the aquifers in 90 percent of China's cities are polluted, 75 percent of the river water flowing through

²⁶ Elizabeth Economy, "The Great Leap Backward? The Costs of China's Environmental Crisis," *Foreign Affairs* Vol. 86 No. 5 (September/October 2007), 39-40.

²⁷ Economy, 40.

²⁸ David Dollar, "China's Economic Problems (and Ours)," *The Milken Institute Review* (Third Quarter, 2005), 55.

cities is unfit for drinking or fishing, and 30 percent of river water nationwide is even unfit for agriculture or industry.²⁹ The water pollution adds to China's miserly natural endowments. China has less than one-third the world average of per capita renewable water resources, and overuse is quickly reducing the amount of available water even further. The surface area of ground subsidence in China due to depletion of water tables equals the entire surface area of Hungary. The groundwater level in Beijing drops six feet per year.³⁰

The increasing rate of environmental damage is especially alarming, leading one to wonder how much longer this trend can continue. Elizabeth Economy, the Director of Asia Studies at the Council on Foreign Relations recounts, "In 2000, China anticipated doubling its coal consumption by 2020; it is now expected to have done so by the end of this year [2007]...In 2001, the Chinese government pledged to cut sulfur dioxide emissions by 10 percent between 2002 and 2005. Instead, it rose by 27 percent." China's use of water increased 6.6 percent between 2004 and 2005. China's demand for wood, pulp and paper is expected to grow 33 percent between 2005 and 2010. Over 80 percent of the East China Sea is considered unsafe for fishing, up from 53 percent in 2000. Energy production, metallurgy and cement production, some of the most polluting industries, increased 20.6 percent in the first quarter of 2007. Despite all of the accumulated environmental damage to date, China's leaders expect to *quadruple* the size of China's economy by 2020.³¹ As China's economy gains increasing momentum, so does the environmental damage left in its wake.

The ill effects of China's environment are spreading beyond its borders. Up to 25 percent of the air pollution in Los Angeles originates in China, with increasing levels of mercury from Chinese power and cement plants found in U.S. soil. Twenty five to forty percent of the world's mercury emissions come from China. The mud at the bottom of the Bohai Gulf has a heavy metal content 2000 times as high as China's own safety allowance. Illegal logging by Chinese firms is spreading into neighboring countries as

²⁹ Economy, 43.

³⁰ Lieberthal, 278.

³¹ Economy, 40, 45, 49 and 52.

China attempts to preserve its own dwindling forests.³² Concerns over China's environmental effects on its closest trading partners may someday outweigh concerns over the economic effects of China's exports on those nations' manufacturing industries.

The toll this environmental damage is taking on China's economy and its people is huge. Respiratory airway diseases linked to air pollution are the leading cause of death in China, occurring at a rate more than twice the average for developing countries.³³ A recent estimate reported that 400,000 additional deaths are caused each year by water and airborne pollution. China's Ministry of Public Health blamed pollution for a striking rise in cancer rates. Incidences of cancer rose 19 percent in China's cities and 23 percent in the countryside since 2005. Other estimates show that environmental damage resulting in sick citizens and depleted resources costs the Chinese economy between 8 and 12 percent of GDP annually.³⁴

3. Limitations to Environmental Reform

Some within the CCP recognize the need to address this pressing problem. In 2005, Pan Yue, the vice minister of China's State Environmental Protection Agency (SEPA) admitted, "the [economic] miracle will end soon because the environment can no longer keep pace."³⁵ As noted above, China has made calls for reducing pollution and introducing cleaner environmental practices. SEPA was upgraded to ministerial status in 1998, with local offices being established down to the county level. New laws have been enacted that require environmental impact studies for major construction projects; local officials are required to disclose pollution statistics; fines are levied on polluting industries. Increasing percentages of China's national budget are dedicated to environmental protection. In 2005, China's next five-year plan included impressive environmental targets, including reducing energy intensity (calculated as unit of energy per unit of GDP) by 20 percent, cutting sulfur dioxide by 10 percent and decreasing water

³² Economy, 44.

³³ Lieberthal, 274.

³⁴ Economy, 46-47.

³⁵ Economy, 38.

use by 30 percent.³⁶ Yet, the pollution appears to still be on the rise, and China has fallen far short of meeting previous pollution-production targets. Why should this be so?

The answer appears to lie in the nature of China's economic reforms in conjunction with the nature of China's political system. Kenneth Lieberthal explains the paradox succinctly:

Upper levels of the bureaucratic system are constrained in their ability to force local leaders to take account of the larger environmental costs of their actions. The most important constraint is simply the fact that a core thrust of the reforms is to accelerate GDP growth through decentralization. Administrative demands from the Center to slow down growth in favor of broad environmental goals are out of step with this basic reform impetus.³⁷

The effort to decentralize the economy and encourage entrepreneurship on the part of local leaders has robbed the center of much of its ability to force environmental change upon local leaders. A further incentive for local leaders to ignore the center's demands for more efforts to protect the environment is that local industries are the primary source of revenue for local governments that have to pay for social services. When the CCP gave up on planning in favor of a market-driven economy, it also let go of its role as provider of social services, forcing local governments to step in. In the competition to land factories and other sources of revenue environmental laws are often overlooked and ignored.

If the environmental consequences of polluting industries were fairly localized, local leaders might have enough of an incentive to step in and force the industry to change its practices. Environmental harm tends to be more widespread across administrative boundaries, however. The costs of cleaning up a local industry are localized, but the benefits are diffused across localities, reducing the incentives for local governments to act. As Lieberthal points out, "In most countries, indeed, local governments are not the most effective units for remedying the environmental damage done by local industry, because at this level the industry is typically an extremely

³⁶ Economy, 48.

³⁷ Lieberthal, 285.

powerful political actor, due to its employment and financial contributions.”³⁸ Yet China’s economic reforms have fragmented the power of the center and devolved it down to the local level, leaving local government as the only actors who can force local industry to change. With the need to grow industry to keep up employment and local government revenue, economic growth wins out over environmental protection.

One good example of this conflict of interest is the Township and Village Enterprises (TVEs), the “motor” for China’s economic reforms. The TVEs were rural collectives that met much of the pent-up demand for consumer goods by turning their energies from farming to light industrial production. In 1998, TVEs made up 26 percent of China’s GDP but produced approximately 50 percent of all pollution. The “low-tech” and low-cost nature of these manufacturing enterprises meant that they tended to use less environmentally-friendly processes. The massive number and small scale of the TVEs made them difficult for authorities to monitor. Most importantly, TVEs provided approximately 80 percent of the revenue for local governments, giving local officials little incentive to dampen economic performance in the name of environmental health.³⁹

The one national actor that could be useful in forcing change at the local level is not up to the challenge. Acting at the ministerial level, SEPA does not have the ability to issue binding orders on other ministries or the provinces. Other ministries also have substantial voices in environmental affairs, including the Ministry of Water Resources, the Ministry of Agriculture and urban construction bureaus, watering down SEPA’s ability to drive environmental matters.⁴⁰ SEPA is also not manned at a level that allows it to act according to its responsibilities. It has a staff of 300 in Beijing and a few hundred spread throughout the nation. This compares poorly with the U.S. EPA’s staff of 9,000 in Washington, D.C. and 8,000 more across the country.⁴¹ The SEPA staffers that do work in the countryside are often overseen by the local CCP officials, whose main incentive is economic growth, creating a considerable conflict of interest.

³⁸ Lieberthal, 283.

³⁹ Lieberthal, 285.

⁴⁰ Lieberthal, 283.

⁴¹ Economy, 51.

Beyond politics, the economics of China's environmental control efforts provide disincentives for good environmental stewardship. Fines are much too low to provide proper incentives for polluters to clean up their activities. For example, the owner of one coal-fired power plant ignored regulations to install cleaner equipment because the new equipment cost as much as 15 years' worth of fines. His incentives were to pay the fines and keep on polluting. Local governments often refund fees to offending units as "rebates" or "incentives" to encourage better environmental practices.⁴² The fee structure itself is inadequate. Polluters are only fined for the single pollutant that *most* exceeds set limits. All other pollutants that exceed set limits are not fined.⁴³

Compounding the economic disincentives for environmental stewardship, the government keeps prices for natural and other resources too low. According to David Dollar, the World Bank's country director for China, the price for water in China's cities is 15 cents per cubic meter, on average, and even cheaper in the countryside. The same amount of water costs 51 cents in the United States and \$1.45 in Germany.⁴⁴ It makes economic sense to waste water when water is so cheap and efforts to save water comparatively more expensive.

There are other structural problems that hinder the CCP's efforts to enhance environmental protection. These issues go deeper than the CCP-induced problems of how the economic reforms have been carried out, how the state bureaucracies are organized, and how fines and costs are levied. These problems are more entrenched and will be more difficult for the CCP to isolate and correct. These problems go to the very heart of the CCP itself.

The biggest issue, and the one the CCP is least willing to address, is the fact that there are no other sources of political power within China to force policy changes. The CCP has maintained a monopoly on political power and prevented any other voices with real power from emerging. Sujian Guo, the director of the Political Science Department

⁴² Economy, 52.

⁴³ Lieberthal, 282.

⁴⁴ Dollar, 54.

and the Center for U.S.-China Policy Studies at San Francisco State University, notes that the CCP's role in Chinese society and politics is not granted by the legislature or the will of the people. It is a *fait accompli* presented by the CCP's victory in the Chinese civil war in 1949.⁴⁵

Guo concludes, "There has been no genuine political liberalization, but 'rationalisation' of the government in many ways. It continues to be the party that decides—unilaterally and unaccountably—what should be done and what steps or measures should be taken."⁴⁶ As shown above, the CCP, especially at the local levels, has no incentive or will to take steps to address environmental issues. Without alternative sources of political power, environmental issues lack empowered authority. Some within the CCP's center, such as SEPA, may see the need to take steps to improve environmental practices, but its power is watered down even within the center. Additionally, the center's ability to act has been further diminished by the decentralizing nature of almost three decades of economic reforms.

Outside of government channels, the CCP continues to limit the opportunity to present opposing political viewpoints. Around the world, grassroots-level movements have been critical in focusing enough attention on environmental problems to generate the required political will at the local and national levels to effect change. China's system severely limits the ability of such grassroots organizations to form. Social organizations and non-governmental organizations (NGOs) are permitted in China as long as they register with the government. Indeed, more and more environmentally-focused NGOs are coming into being. The number of environmentally-focused NGOs has risen from a handful in the mid-1990s to thousands today. Counteracting this positive development is the fact that "Beijing has come to tolerate NGOs and media outlets that play environmental watchdog at the local level, but it remains vigilant in

⁴⁵ Sujian Guo, "The Party-State Relationship in Post-Mao China," *China Report: A Journal of East Asian Studies* Vol. 37 No. 3 (2001): 301-315.

⁴⁶ Guo, 315.

making sure that certain limits are not crossed, and especially that the central government is not criticized. The penalties for misjudging these boundaries can be severe.”⁴⁷

The NGOs’ ability to create a critical mass of concerned, networked and mobilized citizens is hampered by the very rules that allow them to exist in the first place. China’s laws regarding NGOs allow only one organization for each cause locally, and they are not allowed to exist in more than one jurisdiction.⁴⁸ This limits the NGOs’ ability to create broad, nationwide movements. NGOs represent one more potential outlet of alternative political views and policy generation that has been co-opted and undercut by the CCP’s monopolistic hold on power.

The above paragraphs show that if environmental change is to come to China, it will have to originate from within the CCP. Should the CCP overcome all of the aforementioned intervening issues and summon the political will and capacity to push through and enforce more environmentally-friendly policies, a still more insidious dynamic will hamper its efforts, organizational corruption.

Columbia University professor Xiaobo Lu notes that organizational corruption takes many forms in contemporary China, mostly at the lower level, but sometimes reaching the upper strata of CCP leadership.⁴⁹ These range from local officials’ ad-hoc creation of fines, fees and levies to arbitrary and abusive use of regulatory power. Local officials often levy these additional taxes to supplement declining revenue. Adding insult to injury, the funds are often used to line the pockets of local officials instead of providing the much-needed local services that are supposedly their intended purpose. Throughout its various forms, Lu shows that organizational corruption is pervasive within the CCP. The effects of widespread organizational corruption are damaging to the state’s capacity, including

⁴⁷ Economy, 54.

⁴⁸ Lieberthal, 288.

⁴⁹ Xiaobo Lu, "Booty Socialism, Bureau-preneurs, and the State in Transition: Organizational Corruption in China," *Comparative Politics* Vol. 2 No. 3 (2000), 273-294.

the continuing erosion of the integrity and discipline of the bureaucracy. Sustainable development requires commitment, capacity and discipline from the bureaucracy. Corruption is both a result of bureaucratic indiscipline and a factor that further undermines bureaucratic integrity...organizational corruption also has a damaging effect on the rule of law by mocking the legal system and undermining the institutionalization process.⁵⁰

Lu likens the CCP's corruption to Max Weber's "patrimonial officialdom," where "the decentralized appropriation of central power gives rise to localized power structures that are rigid, inadequate for new tasks, and unamenable to reform, rationalization, and regulation," the very qualities necessary for sweeping environmental reform.⁵¹ Corruption is a widespread problem within the CCP and its effects damage the capacity of the state to enforce environmentally-friendly policies, should the greater CCP generate the will to create them.

4. The Solution: Democracy?

With so many factors standing in the way of China's ability to overcome its environmental destruction, what solutions are available? For many, the only real solution to China's environmental problems is democracy. Elizabeth Economy argues,

Its environmental problems stem as much from China's corrupt and undemocratic political system as from Beijing's continued focus on economic growth. Local officials and business leaders routinely—and with impunity—ignore environmental laws and abscond with environmental protection funds, and silence those who challenge them. Thus, improving the environment in China is not simply a matter of mandating pollution-control technologies; it is also a matter of reforming the country's political culture. Effective environmental protection requires transparent information, official accountability, and an independent legal system. Until the party is willing to open the door to such reform, it will not have the wherewithal to meet its ambitious environmental targets and lead a growing economy with manageable environmental problems.⁵²

⁵⁰ Lu, 287.

⁵¹ Lu, 290.

⁵² Economy, 56.

Given this prescription for China's ailing environment, what is the prognosis for the patient's recovery? The prospects for the development of democracy in China remain problematic for several reasons. For one, the very process and sequencing of China's economic reforms has delayed chances for political reform in China, as argued by Mary Gallagher of the University of Michigan.⁵³ She argues against the conventional wisdom that economic progress results in political reforms as a rising business and middle class flex their newfound ability to protect their political interests, showing how "economic development amid increasing openness has contributed to the stability of authoritarian rule in China."⁵⁴ In Gallagher's view, the key to China's economic development without political opening is the influence of foreign direct investment (FDI), and the timing of allowing FDI into the national economy.

According to Gallagher, socialist countries in the process of economic reform, whether in Asia or Eastern Europe, typically face three types of major economic reforms: introduction of FDI into the national economy, reform of the state enterprises, and introduction of private enterprise. China's leaders chose FDI introduction first, and that has made all of the difference, limiting the prospects for political reform. China's economic reform strategy, as already noted, focused on decentralization of central power to local authorities to encourage economic growth through entrepreneurship. By combining decentralization with the introduction of FDI, China created competition between regions, provinces, villages and enterprises for foreign capital. This competition fragmented opposition groups who stood to lose from reforms, in addition to decreasing the incentives for locals to enforce environmental standards.

Once foreign capital and FIEs were present in the country, Chinese leaders could argue that further reforms were necessary to increase the competitiveness of Chinese firms. They thus circumvented the arguments over privatization that took place in other reforming socialist countries, and turned it into a nationalist-vs.-foreign firm argument. "Privatization ('letting go') is necessary so that Chinese 'national industry'...can be

⁵³ Mary Gallagher, "Reform and Openness: Why China's Economic Reforms Have Delayed Democracy," *World Politics*, 54 (April 2002), 338-372.

⁵⁴ Gallagher, 340.

revitalized and strengthened to meet its global competition.”⁵⁵ This strengthens the impetus for more economic reforms involving decentralization and competition, and against political reforms that would weaken the CCP’s (and therefore China’s) power.

Lastly, China’s exploitation of FDI has allowed it to delay the development of private enterprise as a primary source of capital for economic development. FDI has served as a substitute for private enterprise. In China’s economic development, private enterprise “is still in its infancy...subjected to informal bureaucratic discrimination, barriers to capital and financing, and barriers to expansion both across different regions and into the global economy...It is unlikely that domestic private enterprise in China will play a significant role in politics in the near future.”⁵⁶ Under Gallagher’s analysis, the prospects for the development of environmentally-friendly democracy look dim.

Other recent works have shown how China’s economic reforms have limited the rise of other actors that have historically been a strong force in the development of democracy. Teresa Wright wrote for the U.S. Congress-sponsored East-West Center that most actors within China have incentives to support the status quo, limiting the chances of democratic development anytime soon.⁵⁷ Wright analyzes several segments of Chinese society and finds that almost all of them, whether they have been the “winners” or the “losers” of reform, have incentives to support the CCP and the status quo that keeps it in power.

Wright argues that the rising middle class of business entrepreneurs, one force that traditionally pushes for democratic change, has benefited the most from China’s economic reforms and would have the most to lose from political reforms that may redistribute the economic pie to the hundreds of millions of citizens who have not done as well under reforms. The CCP’s continuing control of many economic levers also makes the business class dependent on or partners with the CCP, rather than its adversaries. Organized labor within the SOEs also have incentives to support the CCP, fearing that

⁵⁵ Gallagher, 361.

⁵⁶ Gallagher, 368, 370 and 371.

⁵⁷ Teresa Wright, “Disincentives for Democratic Change in China,” *Asia Pacific Issues*, 82 (February 2007).

“political change might imperil the continued economic strength of the ruling CCP, and thus take away the precious—and precarious—economic security of current SOE workers.”⁵⁸ Laborers within the FIEs also support for the CCP, for they have also done well under China’s economic reforms.

Even laid off SOE workers, those most hurt by economic reforms, have reason to support the CCP. While they have led increasing numbers of protests, their protests tend to be aimed at local officials and have expressed support for central authorities, asking them to return the PRC to its socialist past. Laid-off workers fear that any party that replaces the CCP may be even less tied to socialism than the current CCP. Migrant rural workers are in a similar plight. They have been hurt by the CCP’s reform efforts, but they believe that the CCP is the only party that can keep its socialist promises.

Lastly, the one segment of the population in any society that is most prone to political protest--academics, intellectuals and college students--also tends to support the CCP and the status quo, in a stark turn-around from the student-led protests in Tiananmen Square in 1989. Wright points out that since 1990, there has been a ten-fold increase in the percentage of university students who belong to the CCP (from 0.8 percent to a still small 8 percent), and in 2001 over 33 percent of college students applied to become party members.⁵⁹ This reflects the fact that the CCP still holds the key to economic success, making it more palatable to the rising generation that is more interested in success in business than ideological commitment. China’s higher educational system has also become more “marketized” and less based on merit, so that those entering college tend to come from the rising middle class that has done so well under the CCP’s reforms. They are less threatened by the CCP and more willing to work with it as opposed to against it.

Together, Gallagher and Wright show that there are few who are agitating for political change in China. The CCP appears to have circumvented or delayed China’s progression along the “environmental Kuznets Curve,” at least for now, as economic and

⁵⁸ Wright, 4.

⁵⁹ Wright, 6.

political interests trump environmental interests.⁶⁰ There may be a rising awareness of environmental issues within the public and some circles of government, but there is currently not enough demand among wide swaths of Chinese society for the type of political reforms necessary to turn that environmental awareness into forceful policies to address environmental issues. Even if widespread demand for political reform and environmental protection existed, there remain few if any vehicles to translate that demand into real change.

The hope for the democratic reforms that Economy argues are so vital for addressing environmental issues is dim. Therefore, this is the Catch-22 that the CCP's leaders find themselves in. Their economic reforms have ushered in tremendous economic growth but have also unleashed horrendous environmental degradation that threatens continued growth. Continued economic growth is essential for continued CCP legitimacy, but that legitimacy is directly threatened by the harm done to China's citizens by environmental assault. The very nature of the economic reforms weakens the CCP's ability to address those environmental issues. Additionally, several structural factors of the Chinese state and society, such as the CCP's monopolistic hold on power and rampant corruption, limit the chances for reform, whether environmental or political. Where does China go from here?

5. Caught in the Middle of a 'Trapped Transition?'

In a 2003 essay in *Journal of Democracy*, Minxin Pei attempts to capture the mood of the moment among academia's China-watchers.⁶¹ Pei breaks the debate into two camps, those who believe the CCP will witness "political renewal" and summon the strength, will and capacity to overcome China's daunting challenges, and the "political decay" camp, which believes the CCP is already in unrecoverable decline.

The optimistic "renewal camp" points to signs such as the normalization of succession politics, the (re)introduction of meritocracy into leadership appointments, the

⁶⁰ Naughton, 488.

⁶¹ Pei, 73-81.

development of “input institutions” at the local level, the development of new administrative and fiscal agencies and policies that will add regulation and stability to China’s politics and economics. This vision of the future gives hope that China may indeed succeed in saving its environment.

The pessimistic “decay camp” points to “hyper-concentrated” power within the CCP that leads to violation of governing norms and practices, the cooptation of new social groups emerging as a result of economic expansion, and a “governance crisis” that impairs the CCP’s capacity to lead and manage the populace. The prospects for environmental salvation grow dim under this camp’s prognosis.

Pei concludes by noting that the contradictory claims “raise more questions than they answer. But it is clear that political renewal is still a work in progress while political decay has yet to reach the terminal stage...The most important question then, is: Which process will ultimately overtake the other?”⁶² Pei apparently developed his own answer three years later, as he explains in his 2006 book, China’s Trapped Transition.⁶³ Pei’s distilled argument is that

...two anomalies - faltering institutional reforms and political stagnation - are central to understanding a "trapped transition", a transformative phase in which half-finished reforms have transferred power to new, affluent elites who know better than their Little Red Book-waving predecessors how to resuscitate moribund communism with crony capitalism. Partial reforms have thus created a hybrid, albeit state-centered, system that allows these elites to perpetuate their privileges...the ruling elites have little interest in real reforms...The party, no longer imperiled, is smug and complacent...Riding this momentum, the party may muddle along for some time but it is hard to imagine that China can evolve into a market democracy without a cataclysmic mid-course correction.⁶⁴

Given all that has been offered previously in this section, Pei’s assessment seems most likely. The CCP will maintain its monopoly on power through subversion of all branches of government and potential forms of dissent. Rampant corruption will

⁶² Pei, 80-81.

⁶³ Minxin Pei, *China’s Trapped Transition: The Limits of Developmental Autocracy*, (Boston, MA: Harvard University Press, 2006).

⁶⁴ Minxin Pei, “China is Stagnating In Its ‘Trapped Transition,’” *Financial Times*, February 24, 2006.

continue to pervade the system, weakening and discrediting the rule of law and the bureaucracy's competence and capacity to enforce environmental edicts. Multiple sectors of society converge in their overlapping interests in favor of the status quo. Political change is unlikely in China without a "cataclysm"; without political change, China's ability to redress its environmental issues is equally doubtful.

As Lucian Pye points out, "The Chinese also have a great tradition of muddling through, of seeking out a method, of accepting what is approximately correct, and of living with a host of contradictions."⁶⁵ That may have worked well for China in the past, but the rapidly growing pace of damage being inflicted on China's environment leaves little time for muddling through. It may already be too late.

6. Economic Power: A Problem of Mysteries and Open Sources

The fate of China's economy, environment and society at large is a collection of mysteries that require the analysis of vast amounts of various open sources of information to provide illumination. There are few closely-guarded puzzles but many mysteries to consider, such as whether the CCP can tackle the environmental problems generated by economic growth, or whether the economy can absorb the massive migration of rural workers to the cities, or whether the economy will be able to support an aging population. These are issues that are beyond the control of a single group of decision-makers, even those as powerful as the elite leadership within the Politburo. Many domestic and international factors will interplay to determine the path of China's economic growth and environment.

As China opens up its economy to comply with WTO regulations, more and more information about China's economy becomes publicly available for analysis. Naughton points out that, while official Chinese government statistics may be skewed for economic

⁶⁵ Lucian Pye, "An Overview of 50 Years of the People's Republic of China: Some Progress, but Big Problems Remain," *The China Quarterly*, 159, Special Issue (September 1999), 579.

and political reasons, “they are the most reliable data we have...the official data are the product of a data-collection network systematically analyzed by a large group of conscientious government statisticians.”⁶⁶

The types of data necessary to analyze China’s economy are quite varied. Analysts must consider not only trade, manufacturing and labor data, but environmental, educational and sociological data as well. The growing number of NGOs within China also provides alternative sources of open information, especially on issues such as the environment. As noted above, these NGOs face limitations placed upon them by the CCP, but they do provide additional information that must be collected, assessed and synthesized with official data.

China’s environment provides a good example of the complicated issues facing analysts. It is not merely an issue of identifying the pollutants produced by China’s factories. One must also assess disparate issues such as the contradictory incentives for central, provincial and local actors, the power differentials between those actors, the effect of corruption throughout the system, and the role of local and international NGOs in pressuring the central and local governments into action.

Analysis of China’s economy is not well-served by a stove-piped IC that is limited in its ability to use open information that does not come from clandestine sources. The IC must be able to collaborate between its different elements and with the outside world of academia, business, NGOs and journalists to compile the complete picture. The factors driving and limiting China’s economic growth at the same time are too varied to rely on the limited resources of the IC alone.

C. MILITARY POWER

Recent modernization efforts by the People’s Liberation Army (PLA) have grabbed the headlines. Acquisition of modern, high-tech weapons and the conduct of large, showy exercises have generated the perception among some that the PLA is bent on directly challenging U.S. military supremacy in the region. It is important to look

⁶⁶ Naughton, 140-141.

beyond the headlines to see exactly what improvements the PLA has made, what limitations it still faces, and how this will affect security interests in the region.

In order to accurately assess the PLA's current modernization efforts, it is important to understand the context in which that modernization is taking place. Examining the current foreign policy outlook of the PLA and the threats it perceives to be on the horizon will help one understand what capabilities it is trying to achieve.

The overall goal of the Chinese Communist Party (CCP) is to remain in power. The CCP must maintain legitimacy through continued economic growth and maintenance of China's territorial integrity. The military requirements that follow from this strategy are ensuring access to foreign resources and markets by maintaining open sea lines of communication, securing China's borders, preventing Taiwan from declaring independence and, should deterrence fail, forcing Taiwan back into the fold. The next few pages assess the PLA's ability to achieve these goals as well as its ability to counter any U.S. efforts to intervene militarily in China's affairs. They also attempt to characterize whether Chinese military power can be characterized more as a puzzle or a mystery.

The environment in which the PLA finds itself in attempting to carry out its national defense strategy is mixed. China is at its most secure since prior to the Opium Wars that began in 1840. No nation is an immediate security threat on its borders. It is a modernizing nation with a growing economy and full sovereignty within its current borders (with the disputed exception of Taiwan). The PRC's 2006 Defense White Paper reflects this optimistic outlook: "China's overall security environment remains sound." Yet the same paper balances this optimism with a cautious eye towards the United States, with comments such as:

Hegemonism and power politics remain key factors undermining international security...The United States is accelerating its realignment of military deployment to enhance its military capability in the Asia-Pacific region...[it] continues to sell advanced weapons to Taiwan, and has strengthened its military ties with Taiwan. A small number of countries

have stirred up a racket about a ‘China threat’ and intensified their preventive strategy against China and strove to hold its progress in check.⁶⁷

The PLA’s current modernization efforts can be seen as furthering China’s ability to maintain economic growth and territorial integrity, prevent Taiwan’s secession, and meet the challenges posed by a United States that is at best bent on containment and at worst a threat to China’s security and sovereignty.

In pursuit of these goals, the PLA is attempting to modernize not just its weapon systems, but also the operational concepts with which those weapons are employed, under the doctrine of “limited war under high-technology conditions.” The PLA took great notice of the U.S. military’s successes in the Balkans, Afghanistan, and Iraq (twice). The lessons drawn from those engagements were of the importance of well-orchestrated joint operations, long-range precision-strike weapons, and information dominance. The PLA also saw vulnerabilities in the U.S. military’s need to project power over great distances, huge logistics tail and dependence on secure information networks. These lessons guide the PLA’s modernization efforts. As David Shambaugh explains, “The PLA’s goal is clearly to develop a multifaceted, technologically modern force structure capable of pursuing multiple missions in a regional context.”⁶⁸

To achieve these capabilities against the U.S. military, the PLA is focusing its modernization efforts in areas that can counter U.S. strengths (such as long-range precision strike and carrier-based airpower) and take advantage of U.S. vulnerabilities (such as reliance on long-distance information networks). The PLA’s modernization priorities include air defense, airpower projection, seapower projection, and information warfare. All of these capabilities serve the dual purpose of increasing China’s ability to intimidate Taiwan, as well as countering the United States’ ability to intervene on Taiwan’s behalf.

⁶⁷ Information Office of the State Council of the People's Republic of China, “China’s National Defense in 2006,” [http://english.peopledaily.com.cn/whitepaper/defense2006/defense2006\(1\).html](http://english.peopledaily.com.cn/whitepaper/defense2006/defense2006(1).html), accessed October 23, 2007.

⁶⁸ David Shambaugh, *Modernizing China’s Military: Progress, Problems and Prospects*, (Berkeley, CA: University of California Press, 2002), 71.

The next few pages trace China's efforts to upgrade its air, naval and information warfare capabilities. They also address critical areas needed to support such upgrades, such as defense budgeting, the defense industrial sector and demographic and sociological concerns. It is fairly easy to catalog the long list of technical upgrades the PLA has made to its conventional weapon systems, especially through purchasing advanced weaponry abroad. Basic information is available through open sources, but the exact capabilities of China's weapon systems still requires a dedicated effort to ferret out secrets.

1. PLA Air Force

China has been working for some time to upgrade and modernize the PLA Air Force (PLAAF). In 1996 the Central Military Commission released a statement in the newspaper *Jiefangjun Bao* calling for,

the urgent upgrading of the country's Air Force to neutralize growing threats from regional neighbors and other countries...Our country now faces a serious challenge...China needs to develop airborne early warning systems and foster research in the development of high-tech electronic combat systems...If threatened from the air, China must have the ability to carry its defense strike capability to targets outside its own airspace.⁶⁹

This clearly shows a desire to improve China's offensive and defensive capabilities with a focus on high-technology systems. To begin with air defense, which the Chinese see as necessary to counter any U.S. or Taiwanese attempts to strike the Chinese mainland, the PLAAF has purchased very capable SA-10s and SA-20s (which can target cruise missiles as well as conventional aircraft) and has deployed capable indigenously-produced weapons as well. The PLAAF has stated a goal of developing a truly integrated air defense system that can effectively track, target and strike hostile air activity.⁷⁰

⁶⁹ As quoted by Kenneth W. Allen, "PLA Air Force Operations and Modernization," in *People's Liberation Army After Next*, ed. Susan M. Puska, (Carlisle PA: Strategic Studies Institute, 2000), 189.

⁷⁰ Allen, 223.

The PLAAF has also been acquiring weapon systems that would allow it to project airpower through precision strikes. The three primary advanced aircraft in the PLAAF inventory are Russian-designed Su-27s and Su-30s and indigenously-designed F-10s. These aircraft not only improve the PLAAF's ability to defend Chinese airspace, but also to strike targets with precision hundreds of miles from China's borders.⁷¹ These aircraft are complemented by modern precision-guided weapons, newly-acquired refueling aircraft and programs to develop aerial command and control platforms.

Merely owning advanced weapons is not enough. The PLAAF has also been striving to enhance its ability to effectively employ the advanced airpower it has been acquiring. While flight training hours remain, "limited at best" (China's Su-27 pilots fly roughly one-third to one-half the number of hours flown by U.S. pilots), the PLAAF has taken steps to increase the sophistication and realism of its training. Improvements include the creation of fighter aggressor units to enhance the PLAAF's tactical abilities, training at more demanding and offensively-oriented missions, flying in all weather and over water and training in teams of dissimilar aircraft.⁷² The PLAAF is also adjusting its logistics infrastructure to support more high-tech, rapid response operations.

These are initial steps in the right direction, but they will require time to make a difference across the entire force. As Kenneth Allen points out, "The PLAAF is in the process of modernizing, but it still has a long way to go," adding that "in 10 years the PLAAF will be a much smaller force, but will have greater range and lethality than the PLAAF of the 1990s."⁷³

2. PLA Navy

The PLA Navy (PLAN) has also been improving its capabilities to project Chinese power. In 1995 Jiang Zemin stated that,

We can be sure that the development and utilization of the ocean will be of increasingly greater significance to China's long range development. This

⁷¹ Allen, 214-223.

⁷² Allen, 206.

⁷³ Allen, 233 and 190, respectively.

being the case, we must see the ocean from a strategic plane, and...set out new and higher requirements on navy building. We must...step up the pace of navy modernization to meet the requirements of future wars.⁷⁴

To meet this goal, China has purchased advanced systems such as *Sovremenny* destroyers with Sunburn missiles (both first designed by the Soviets to target U.S. aircraft carriers and Aegis destroyers) and quiet *Kilo* diesel-powered submarines from Russia. Both of these systems can be used to blockade Taiwan in a crisis or target (or at least hold off at a distance) U.S. aircraft carriers responding to a crisis. China has been purchasing and developing other guided-missile destroyers and frigates as well. Newer submarines and ships are complemented by advanced weapons such as Russian-designed wire-guided and wake-homing torpedoes.⁷⁵

In addition to improving weapon systems, the PLAN has been making strides in improving its ability to employ those weapons effectively. Bernard Cole notes that the PLAN is “beginning to make progress in this crucial area of integrating the sensor, weapon and command and control functions.”⁷⁶ Cole further notes several other areas where the PLAN is making progress, such as training and education, exploiting a growing national scientific and technological infrastructure, development of doctrine and tactics, and development of strategic planning, but given current limitations, he concludes that “China’s navy has a very long way to go before becoming a twenty-first century force.”⁷⁷

3. Information Warfare

The one area of PLA modernization where it is the most difficult to determine its progress is in the realm of information warfare. PLA writers have taken note of the U.S. military’s reliance on information networks to coordinate operations over vast stretches of the globe, gather and disseminate intelligence, and provide targeting information for

⁷⁴ Bernard Cole, *The Great Wall at Sea: China’s Navy Enters the Twenty-First Century*, (Annapolis, MD: Naval Institute Press, 2001), 170.

⁷⁵ Cole, 91-98.

⁷⁶ Cole, 111.

⁷⁷ Cole, 137.

precision-strike systems.⁷⁸ Chinese military leaders and academics have written widely on the subject of information warfare and have noted its importance and China's need to develop its own capabilities. In 2000, Dr. Shen Weiguang, described as "the father of Chinese IW" wrote that "The information war will be the leading form of war in the 21st century...There has been an unmistakable strategic evolution in the Chinese military as it adjusts to the new military revolution"⁷⁹

China has shown some capability to target the U.S. satellites that feed and comprise those networks with both lasers and hard-kill missiles.⁸⁰ China has also shown an interest and capability in attacking computer networks through malicious software.⁸¹ How well China can employ these systems against the U.S. military is unclear but the activities cited above indicate that China's capabilities in this field are advanced and expanding. Unlike large, conventional weapon systems such as fighters and destroyers, most of the technical work needed for these weapons can take place in secret and be developed without assistance from the outside.

4. Technological, Economic and Social Constraints

The PLA has aggressive modernization goals, but it still faces many daunting challenges before it can realize all of these capabilities. China's biggest impediment towards technological modernization is that most of the PLA's advanced weapons (other than information warfare and missile and space weapons) are imported or based on imported technology. The PLA has limited capabilities to develop new technologies on its own. As Bernard Cole and Paul Godwin stated, "Despite reforms initiated in the early 1980's, [China's military industrial complex] remains the huge, lumbering, obsolescent

⁷⁸ Timothy L. Thomas, *Dragon Bytes: Chinese Information War Theory and Practice* (Fort Leavenworth, KA: Foreign Military Studies Office: 2004), 27.

⁷⁹ Shen Weiguang, *World War, the Third World War--Total Information Warfare* (Beijing, Xinhua Publishing House, 2000) as translated by OpenSource.gov accessed October 25, 2007.

⁸⁰ Michael Pillsbury, *An Assessment of China's Anti-Satellite and Space Warfare Programs, Policies and Doctrines* (Washington, D.C., U.S.-China Economic and Security Review Commission, January 19, 2007).

⁸¹ Demetri Sevastopulo, "Chinese military hacked into Pentagon," *Financial Times*, September 3, 2007.

behemoth built with Soviet assistance in the 1950's.”⁸² A recent RAND study explained that barriers to defense industry reform include inertia caused by a long history of weak or failed reform efforts, bureaucratic turf battles that slow and muddy the acquisition process, and “localist” tendencies within the defense industries that hinder the nationwide cooperation required for efficient business operations.⁸³

This has seriously impaired the PLA’s ability to catch up with the most advanced nations. The few weapons that China has developed indigenously, such as the F-10, do not augur well for the Chinese defense industry. With development beginning in the early 1980s, the technology behind the F-10 is already 25 years old. While China struggles to operationally and logistically integrate the modern systems it is developing and purchasing, the more modern nations are pressing ahead in developing even more capable systems.

It is one thing for a service to own modern pieces of equipment such as jet aircraft or destroyers, but knowing how to effectively employ them in joint operations is a completely different matter. As noted earlier, China has made an effort to train in realistic, high-tech joint operations, but it is unclear how widespread this realistic training has been. For one small example, Dennis Blasko pointed out that “many articles describe the use of balloons or model airplanes to simulate enemy land attack cruise missiles or stealth aircraft for air defense target practice.”⁸⁴ The lack of realism does not bode well for the PLA’s wider ability to effectively operate a modern joint force in fast-paced, widespread operations.

While the PLA has some key capabilities, such as fourth-generation Su-27s, it lacks other capabilities that would allow its most modern weapons to operate at full capacity. As Shambaugh points out, the PLAAF “has a total lack of airborne command

⁸² Bernard Cole and Paul Godwin, “Advanced Military Technology and the PLA: Priorities and Capabilities for the 21st Century,” in Larry Wortzel, ed., *The Chinese Armed Forces in the 21st Century*, (Carlisle, PA, Strategic Studies Institute, 1999), 166.

⁸³ Keith Crane, Roger Cliff, et. al., *Modernizing China’s Military: Opportunities and Constraints*, (Santa Monica, CA: RAND Corporation, 2005), 174-175.

⁸⁴ Dennis Blasko, *The Chinese Army Today: Tradition and Transformation for the 21st Century*, (London, Routledge, 2006), 190.

and control platforms to coordinate a complex air campaign and of sufficient numbers of in-flight tankers to refuel fighters while they loiter.”⁸⁵ Similar shortcomings exist in the PLAN’s ability to replenish its naval forces at sea.

Much interest has been paid to the PLA’s budget increases. According to Crane, et. al., the official PLA budget has increased eleven-fold since 1978, but the true budget increases are likely 1.4 to 1.7-times higher than that.⁸⁶ Whatever creative accounting practices are used, it is clear that China’s rising GDP has fueled a corresponding rise in defense spending. But not all of that increased spending has gone directly into improved weapons systems. Beijing argues that personnel costs have consumed much of the increased spending. According to the PRC’s 2002 Defense White Paper, “the past decade has witnessed...an 84% salary raise for officers and 92% allowance raise for soldiers.”⁸⁷ While PLA wages are still very low by Western standards, such large wage increases spread across a force of 2.3 million add up quickly. In a nation with a rising per capita GDP, it is reasonable that the PLA would have to spend more on personnel to attract the type of people it needs to field a modern, high-tech military. This leaves less money available for new weapons and realistic, joint training.

It is unclear if China will be able to maintain a high level of defense spending in the face of other pressures on the PRC’s budget. The CCP must maintain economic growth and social stability to maintain legitimacy and remain in power, so when push comes to shove, spending on the PLA will likely take a back seat to spending on social programs and economic infrastructure. The need to maintain social stability will also likely dampen reform efforts in the state-dominated defense industry, as most reforms of state-owned industries involve dissolution of social welfare programs.⁸⁸

The PLA also faces military cultural barriers to modernization. According to Shambaugh, the Leninist Soviet military model on which the PLA is based provides

⁸⁵ Shambaugh, 107.

⁸⁶ Crane, et.al., 105, 134.

⁸⁷ Information Office of the State Council of the People's Republic of China, “China’s National Defense in 2002,” <http://english.people.com.cn/features/ndpaper2002/nd.html>, accessed October 30, 2007

⁸⁸ Crane, et. al., 174.

“minimal leeway for independent interpretation of orders.”⁸⁹ In high-tech modern warfare, the flexibility to quickly react to rapidly changing situations and the “fog of war” is key. Similar barriers within the military culture of the PLA, such as inter-service rivalries, will likely reduce the PLA’s ability to integrate joint operations.

Additionally, James Mulvenon argues that, “Corruption is the most dangerous cancer in the ChiCom party-state today” and points out that while corruption in the PLA is now “a more manageable discipline issue” it is still a problem among top-level PLA leaders, and probably further down the chain.⁹⁰ This long-standing acceptance of corruption within the CCP and PLA will likely weaken or distract from serious efforts to reform the defense industry or the PLA itself.

The evidence above supports Shambaugh’s argument that, “there remains a large gap between the theory and aspirations of the PLA’s new doctrine of fighting ‘limited wars under high-technology conditions’ and its actual capabilities.”⁹¹ Regardless, the PLA can field some key weapon systems that will give it a technological advantage over lesser rivals such as Vietnam, the Philippines or the Central Asian states. This could allow China to impose its will or at least defend its interests in some potential regional disputes over territory or access to resources. Measured by this limited yardstick, the PLA’s modernization efforts have been successful and have increased the PRC’s sway within its immediate region.

China’s recent modernization efforts are likely to enter into any calculus within the United States on whether to intervene in a crisis in the Taiwan Straits. Some of the PLA’s new capabilities, such as improved air defenses, difficult to detect submarines, anti-ship cruise missiles, and anti-space weapons, may carry enough of a threat to U.S. forces to limit the extent to which the United States is willing to intervene. They may slow or limit the advance of U.S. forces just enough to give the PLA time to accomplish its goals. Information warfare weapons may disrupt U.S. deployments and operations

⁸⁹ Shambaugh, 108.

⁹⁰ James Mulvenon, “So Crooked They Have to Screw Their Pants On: New Trends in Chinese Military Corruption,” *Chinese Leadership Monitor*, 19, Fall 2006, 1.

⁹¹ Shambaugh, 107.

just enough to level the playing field or put the United States into a defensive posture. The PLA does not have to defeat U.S. military forces outright to achieve its goals. The PLA's modernization efforts will probably alter the strategic calculus just enough to let the PLA carry the day in certain, limited scenarios short of all-out war against the United States.

The PLA accurately sees the need for high-tech modern forces capable of operating in joint environments. It is taking steps to get there and is making limited progress in weapons acquisition, doctrine development and education and training. Many technological, economic and social factors will limit the extent to which the PLA reforms itself, but it will end up with a more capable force than before. While not being able to challenge U.S. military superiority directly, some of the key capabilities developed by the PLA will be just enough to complicate U.S. military operations and possibly give the PRC enough strategic breathing space to accomplish certain limited goals, such as deterring the outright secession of Taiwan.

5. Military Power: A Problem of Puzzles and Secrets

Understanding China's military strength is still a game of trying to piece together a puzzle of true capabilities based primarily on secret information. As always, exact capabilities of weapon systems and operational battle plans will remain closely-guarded secrets that will require traditional technical and human intelligence collection and analysis. In that regard, China's military may not present much of a different intelligence target than did the Soviet military. The IC's traditional technical military intelligence apparatus will continue to serve decision-makers well.

The real question for the United States regarding China's military capabilities lies in the mysteries of how well China can match its intent with its capabilities, how well the PLA will be able to integrate its new technical capabilities through advanced doctrine, education and training, and whether China will be able to develop the long-term industrial capacity to enable continued military modernization without having to buy its

most advanced weapons abroad. To this end, collecting secrets may still be important when analyzing the PLA, but open sources of information can play a much more important role.

In fact, David Shambaugh opens his 2002 book *Modernizing China's Military* by noting that,

There was certainly no dearth of materials and data available. If anything, the problem for active research in PLA studies today is to gain effective bibliographic control over the multitude of sources...These books and periodicals represent just the tip of the iceberg of available material on the PLA in China, and they also belie the common belief that there is no military transparency in China. All one has to do is be able to read Chinese and physically gain access to the [open] materials. To be sure...the PLA does a good job of protecting its secrets, but there is a tremendous amount of information readily available in these publications. Regrettably, foreign government translation services like the U.S. Foreign Broadcast Information Service spend virtually no time and resources translating such books or parts of them. FBIS translation of Chinese military newspapers and journals is little better.⁹²

Other academic and journalistic works previously cited show that extensive information on PLA capabilities can be gained through open sources and interviews with PLA personnel, including valuable insight on PLA training, education and doctrine. This indicates that the IC must be willing and able to incorporate the vast amount of non-government work available to understand China's growing military capabilities. This work must include many elements beyond the scope of mere weapons technologies to include broader areas of industrial and educational capacity. A traditional, stove-piped focus on secrets-based intelligence is not likely to yield a complete picture, and would also be a waste of finite resources if the same information is publicly available elsewhere.

The IC must be more open to outside sources of information and be able to tie that information with the secret information it gathers. Collaboration is critical to link together the sociological, demographic, economic and industrial trends that will shape

⁹² Shambaugh, xxv-xxvi.

China's defense posture for decades to come. The IC must strike a balance between the detailed and technical collection and analysis of secrets and the ability to leverage the vast volumes of open source data available.

D. SOFT POWER

The leaders of the People's Republic of China (PRC) continue their drive to modernize the country and grow the economy. This continued economic growth depends on a secure international setting that allows China's exports to flow out and required resources to flow in. Ironically, China's rapid economic rise may threaten to disrupt the amicable international context that has enabled its stunning success over the past two decades. China's growing economy and rising diplomatic and military clout make some of its neighbors and trading partners nervous, wary of the PRC's potential to use its new-found power belligerently.

To counter such fears and lay the groundwork for continued economic growth and success, Beijing has initiated a "charm offensive", wielding the tools of soft power to present a cooperative, helpful face and allay the world's fears. Beijing has taken great care to overcome the dark images of the CCP's power gone awry in the Great Proletarian Cultural Revolution and Tiananmen Square and present an image of a China that the world can trust. This section examines the rise of China's soft power, starting with the internal and external factors that led to the CCP's embrace of soft power. It then highlights the key soft power tools Beijing has at its disposal and how it uses those to advance its interests, often at the expense of U.S. interests, highlighting the diverse demands this places on U.S. intelligence analysts.

The term "soft power" was first coined by Joseph S. Nye in a piece in piece for *Foreign Policy* in 1990. As the Cold War was ebbing, he sought to define a new kind of power that was emerging, distinct from the "hard power" concepts of economic and military might. He argued that "misleading theories of American decline and inappropriate analogies...have diverted our attention away from the real issue—how power is changing in world politics."⁹³

⁹³ Joseph S. Nye, "Soft Power," *Foreign Policy* 80 (Autumn 1990): 153.

As Nye described soft power further in his article, he used phrases that seemed to foreshadow China's approach to many foreign policy issues a decade later,

If a state can make its power seem legitimate in the eyes of others, it will encounter less resistance to its wishes...Co-optive power is the ability of a country to structure a situation so that other countries develop preferences or define their interests in ways consistent with its own. This power tends to arise from such resources as cultural and ideological attraction as well as rules and institutions of international regimes.⁹⁴

Of course, as Nye wrote this, Beijing still stood in the long shadows of its use of force in Tiananmen Square one year earlier. It was too soon to see the softer side of China emerging. But time would show that Beijing would become quite adept at wielding the tools of soft power to accomplish its goals and refurbish its image, which had become tarnished from clumsy application of the more traditional forms of power.

1. China's Gradual Recognition of Soft Power

China's recognition of soft power began in the late 1980s and continues today.⁹⁵ In April 2006, Zheng Bijian, the former executive principle of the CCP Central Committee's Party School and one of the most influential thinkers on foreign policy in the CCP, stated,

The essence of China's peaceful development is realizing the great rejuvenation of the Chinese civilization in the course of joining contemporary human civilizations in the first half of the 21st century. China will appear in front of the people of the world in the image of a peaceful power, a civilized power, and an amiable power.⁹⁶

⁹⁴ Nye, "Soft Power": 167-168.

⁹⁵ David Shambaugh, "China Engages Asia," *International Security* Vol. 29 No.3 (Winter 2004/05): 64-99.

⁹⁶ "The Essence of China's Peaceful Development is the Great Rejuvenation of the Chinese Civilization," Xinhua News Agency, April 9, 2006, as carried by the BBC Worldwide Monitoring Service.

In January 2007, Hu Jintao stated that China needed to take steps that “will be conducive to strengthening China’s soft power.”⁹⁷ The CCP has fully recognized and embraced soft power as a key element of securing China’s interests internationally.

China focuses most of its soft power efforts at increasing its influence in the developing world. It is most effective in Southeast Asia, Latin America and Africa, where poor economic conditions and neglect by the West make for a receptive audience for Chinese soft power. Africa provides a particularly strong example of the positive and negative consequences of China’s attempts to wield its soft power and provides a good example of the broad geographic and topical scope American analysts of China must cover.

2. Chinese Soft Power in Action Across Africa

China’s soft power in Africa derives primarily from a growing economic presence and influence across the continent. China’s investment in Africa is based on a strategy that combines foreign policy with its own domestic economic development. China’s continued economic growth relies on expanding access to natural resources, primarily energy resources, but also materials such as copper, bauxite and uranium. As David Zweig and Bi Jianhai point out, “an unprecedented need for resources is now driving China’s foreign policy.”⁹⁸ China is investing in Africa in order to gain access to the continent’s vast resources. In a self-propelling cycle, the investment gives China new political and diplomatic leverage, which it can wield to gain continued access to more resources.

China’s investment in Africa also provides outlets for Chinese companies such as construction and petroleum firms and opens markets for Chinese-produced consumer goods. China’s investment is offered with few political strings attached. The only requirements appear to be a willingness to recognize the People’s Republic of China instead of Taiwan and to provide preferential treatment for Chinese firms to win

⁹⁷ Jen Hui-wen, “China Establishes Soft Power Development as Strategic Mission,” *Hong Kong Economic Journal*, March 30, 2007, as translated by Opensource.gov, accessed April 12, 2007.

⁹⁸ Zweig and Jianhai, 25.

construction and development contracts. Thus, Chinese aid and investment is often more attractive to African leaders than aid and investment from the West, which often comes with stipulations calling for good governance and spending on social projects.

China's investment is focused heavily on infrastructure projects. China provided \$2.7 billion in aid to Africa in 2004, with an emphasis on infrastructure projects. This compares impressively with the \$11 billion in aid Japan provided in total to Africa between 1993 and 2004.⁹⁹ China often moves into places with little or no existing infrastructure and provides badly-needed investment and aid. China is building Chad's first oil refinery, in addition to a cement plant, irrigation projects, new roads and a cellular phone network.¹⁰⁰ Other infrastructure projects include \$600 million for the Bui dam in Ghana, \$2.3 billion for the Mepanda Nkua dam and hydroelectric plant in Mozambique, \$1.6 billion for an oil project in Nigeria,¹⁰¹ as well as \$2 billion in aid and loans to Angola to build railroads, schools, roads, hospitals, bridges and a fiber-optic network, mostly with Chinese firms.¹⁰²

China's policy pronouncements show that this is clearly part of its strategy. The "Forum on China-Africa Cooperation Beijing Action Plan (2007-2009)" explicitly states that China will "keep infrastructure building, particularly transportation, telecommunications, water conservancy and power generation facilities, as a key area of cooperation."¹⁰³ Comparatively, the West tends to favor assistance that promotes social issues such as health care and education. These do not have the same immediate and visible economic impact that infrastructure projects do, making Chinese assistance more attractive to some African leaders. Chinese infrastructure assistance is not completely

⁹⁹ Joshua Kurlantzick, "Beijing's Safari," *Carnegie Endowment Policy Outlook* No. 29, 3, November 2006, <http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=18833&prog=zch> accessed 18 September 2007.

¹⁰⁰ Howard French and Lydia Polgreen, "China, Filling a Void, Drills for Riches in Chad," *New York Times*, 13 August 2007.

¹⁰¹ Todd Moss and Sarah Rose, "China ExIm Bank and Africa: New Lending, New Challenges," Center for Global Development, November 2006.

¹⁰² Esther Pan, "China, Africa and Oil," *Council on Foreign Relations Background*, 26 January 2007.

¹⁰³ Government of China, <http://www.fmprc.gov.cn/zflt/eng/zyzl/hywj/t280369.htm>, accessed 18 September 2007.

altruistic, however. Improved infrastructure makes resource extraction more efficient for Chinese firms and makes for better markets for Chinese goods.

China's primary tool for providing assistance to Africa is the state-controlled Export-Import Bank. The bank's main activities are export credit, international guarantees, loans for overseas construction and investment and official lines of credit. The bank was established in 1994, but it has really become a major tool of Chinese influence much more recently. Its disbursements have more than tripled between 2001 and 2006, reaching \$15 billion a year.¹⁰⁴ China tends to favor loans instead of grants, because loans provide leverage. The loans often come with the stipulation that the work goes to Chinese firms. The previously-cited \$2 billion loan to Angola required that 70 percent of the projects go to Chinese firms. As long as a nation continues to strengthen political and economic ties with China, patterns indicate that China will regularly forgive the loan.¹⁰⁵ The danger of Chinese loans is that if they are not forgiven quickly, poor nations struggling with debt or newly relieved of debt by Western donors will be saddled with continued debt payments, stifling their ability to provide for their people.

China also favors working through regional banks such as the African Development Bank (AfDB), over Western-dominated institutions such as the World Bank. China has more influence over the AfDB than it does over the World Bank, making it a more attractive venue for funding projects. In fact, Shanghai hosted the most recent AfDB annual meeting in May 2007. This offers African leaders other avenues for funding that do not come with onerous strings attached, creating a competitive market for aid, where recipients can play lenders against each other. Angola was set to receive a loan package from the IMF in 2005 that was subject to intensive monitoring of how the funds were spent. At the last minute, Angola refused the offer and instead accepted a loan from China that required no monitoring of the funds. Chad was receiving aid from the World Bank to develop an oil pipeline, but the World Bank required that oil profits be spent on social welfare. When the president made intimations that he would seek assistance elsewhere, the World Bank loosened its lending rules, allowing the Chadian

¹⁰⁴ Moss and Rose.

¹⁰⁵ Kurlantzick, "Beijing's Safari."

government to spend funds on weapons and the president's personal motorcade. Soon afterwards, Chad switched recognition from Taiwan to the PRC and China purchased the rights to develop vast areas of Chad's oil fields.

China's lending practices also fit with China's long-standing policy of "non-interference in internal affairs" which allows China to cultivate partners without pressure to improve its own human rights record. Another advantage of Chinese assistance is that China can direct the activities and investments of its state-owned enterprises, prompting them take on projects that Western firms would normally pass up due to political or economic risks. China is willing to invest in areas deemed as too risky or corrupt by Western banks and politicians, providing access to funds that would otherwise be unavailable for many African nations.

China's strategy has benefits for both Africa and China. Trade between the two entities has boomed. In the first ten months of 2005, trade between Africa and China surged 39 percent to \$32 billion.¹⁰⁶ Much of that growth can be attributed to China's increased oil imports from Africa. China receives one-third of its oil from Africa.¹⁰⁷ Angola is China's largest supplier of oil, with 522,000 barrels a day.¹⁰⁸ China receives 64 percent of Sudan's oil exports.¹⁰⁹ China's strategy of increasing investment and aid to ensure access to resources appears to be paying off.

The growing relationship has also provided benefits to Africa. Africa witnessed 5.2 percent growth in its economy in 2005, its highest growth rate on record. China is Africa's third most important trading partner, behind the United States and France. African exports to Asia rose 20 percent between 2001 and 2006, China is Africa's second-largest importer of resources, and China plans on tripling trade with Africa by 2010.¹¹⁰ China's foreign direct

¹⁰⁶ BBC, "China-Africa trade jumps by 39 percent," 1 June 2006, <http://news.bbc.co.uk/go/pr/fr/-/2/hi/business/4587374.stm>, accessed 18 September 2007.

¹⁰⁷ Economist.com, "China lays of the charm," 8 November 2006, accessed via Lexis-Nexis 4 April 2007.

¹⁰⁸ Kurlantzick, "Beijing's Safari."

¹⁰⁹ Pan.

¹¹⁰ Kurlantzick, "Beijing's Safari."

investment into Africa was \$900 million in 2004¹¹¹ and China's direct aid to the continent that year was \$2.7 billion.¹¹² China has eliminated tariffs on 190 different imported goods from 28 of Africa's poorest nations. China's focus on Africa has provided economic and financial resources that were not forthcoming from the West and given the continent a much-needed economic shot in the arm.

The growing relationship appears to be winning friends for China within Africa. According to one poll, 62 percent of South Africans believe China is a positive influence in the world.¹¹³ Felix Mutati, the finance minister of Zambia claims, "There is no doubt China has been good for Zambia. Why should we have a bad attitude toward the Chinese when they are doing all the right things? They are bringing investment, world-class technology, jobs, value addition. What more can you ask for?"¹¹⁴ Many in Africa find China's willingness to invest with an approach of non-interference refreshing, after decades of paternalistic relations with Western nations. Mahamat Hassan Akbar, a Chadian lawyer echoes this sentiment. "Let the Chinese come. What Africa needs is investment. It needs partners. All of these years we have been tied to France. Look what it has brought us."¹¹⁵

There are costs to Africa, such as the importation of poor governance and minimal labor and environmental standards. "China's no-strings-attached approach is problematic, particularly if its effect, if not its intent, is to undermine others' efforts to change situations on the ground. Often what is happening is underwriting of repression," charges Kenneth Roth, the executive director of Human Rights Watch.¹¹⁶ Chinese companies often have little experience operating within strict safety or environmental controls at home, and the operating environment in Africa is often even more permissive. An explosion in 2005 at the Chinese-owned Chambishi copper mine in Zambia killed 46

¹¹¹ Pan.

¹¹² Kurlantzick, "Beijing's Safari."

¹¹³ Ibid.

¹¹⁴ French and Polgreen, "China's Aid in Africa Carries a Price Tag," *New York Times*, 21 August 2007.

¹¹⁵ Ibid.

¹¹⁶ French and Polgreen, "China, Filling a Void, Drills for Riches in Chad."

workers. The locals blamed lax Chinese safety standards and the Chinese company's drive for profits as the ultimate causes of the blast. Anti-Chinese protests in the area eventually led the Zambian government to cancel a trip to the mine by Hu Jintao during a state visit earlier in 2007.

Despite protests from some quarters of African society, there is little to indicate that China and Africa will begin to reduce their economic relationship. Even if China cannot sustain its current impressive economic growth, there will still be a large demand for Africa's cheap resources and vast sums of Chinese funds available for investment and aid to keep the resources flowing. African nations will still be desperate for financial assistance and receptive to China's non-interference approach. China's investment in the continent does provide a short-term boost to the economies of Africa, providing cash and building infrastructure. However, the long-term costs of continued stagnation up the development ladder and lack of political progress may outweigh the short-term gains.

3. Growing Diplomatic Clout

China supplements its growing economic clout with growing diplomatic clout as well. China has become an active player in pan-governmental forums, especially regionally. China was a prime driver in the creation of the Shanghai Cooperation Organization (SCO). In addition to China, the SCO includes Russia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. China has been instrumental from the beginning, even hosting the SCO's headquarters in Shanghai. The SCO started as a forum focusing on non-traditional security threats, such as terrorism. The aim was to build confidence among member nations, through measures such as troop reductions and pre-notifications of exercises.

Under China's leadership, the SCO is widening its scope. In 2003 it began considering economic issues in addition to security issues. The Chinese formally proposed the SCO establish an economic free trade zone. China wielded its influence in the SCO during a 2005 vote calling for member states to establish withdrawal dates for

U.S. forces stationed in Central Asia. This is a good example of how China uses its soft power in regional forums where the United States is not present to further Chinese interests at the cost of the United States.

China is an active dialogue partner of the Association of Southeast Asian Nations (ASEAN), and a collaborator under the auspices of ASEAN+3 (ASEAN plus China, Japan and South Korea). In 2001, China and ASEAN signed the Framework Agreement on Economic Cooperation and Establishment of the China-ASEAN Free Trade Area. This was followed the next year with the Declaration on Conduct in the South China Sea, Joint Declaration on Cooperation in the Field of Nontraditional Security Issues, and the Memorandum of Understanding on Agricultural Cooperation. In 2003, China became the first non-ASEAN nation to sign ASEAN's Treaty of Amity and Cooperation, which calls for nonaggression and noninterference among signatories and provides for conflict resolution mechanisms.

China's active participation in the SCO and ASEAN reflects Beijing's growing acceptance of multilateral approaches to addressing security and economic issues. China has agreed to surrender some of its flexibility in return for greater access to setting the agenda, especially in forums where the United States is absent.

China is also combining its growing regionalist approach with its select military transparency. At the 2003 ASEAN Regional Forum foreign ministers meetings, China proposed increasing military exchanges and creating an annual security policy consultation that would include issues China had previously refused to discuss, such as "future challenges to regional security, military strategies and doctrines of member states...defense modernization...defense conversion and civil-military relations."¹¹⁷ China is attempting to downplay fears that it is bent on military supremacy and raise its profile as a cooperative nation, which lead to the cultivation of Chinese soft power.

China does not intend to stop its multilateral engagement with merely the SCO and ASEAN. Fu Ying, the former director general of the Department of Asian Affairs in the PRC's Ministry of Foreign Affairs, stated, "Taking ASEAN+3 cooperation and SCO

¹¹⁷ Shambaugh: 88.

as two focal points, China will make pioneering efforts to set up regional cooperation and push for the establishment of a regional cooperation framework conforming to the characteristic of regional diversity.”¹¹⁸

4. Chinese Soft Power and the United States

Chinese soft power has implications for the United States that are more direct than merely encouraging poor governance in the developing world. Chinese soft power affects U.S. interests more directly, especially regarding other major regional and global powers. China and the United States have a complex relationship. While they are mutually suspicious of each other, growing trade makes the two nations reliant on each other. China attempts to use some soft power to sway U.S. policies. At the outset of Hu Jintao’s visit to the United States in April 2006, he stopped in Seattle to sign business deals worth \$16 billion as a way of increasing good will and reminding the United States of China’s economic importance. But the U.S. emphasis on China’s human rights issues, protectionist worries about China’s expanding economy, and wariness over China’s growing military prowess severely limit the appeal of China’s soft power in the United States.

China’s soft power often works against the United States throughout the world. China’s soft power is on the rise while the U.S.’ is generally on the decline. China is non-ideological in its application of soft power (recognition of Taiwan aside). China is willing to trade with, invest in and provide aid to any nation that can further Chinese interests diplomatically, economically or militarily. This limits the U.S. ability to isolate rogue states such as Sudan, Iran and North Korea. China also focuses its efforts in areas that are of low priority to the United States. This may lead to increased “competition” for aid as the United States refocuses its efforts in these areas to avoid losing influence to China. China’s attractiveness as a development model also works against U.S. interests. Developing nations can follow China’s example and ignore U.S. calls for human rights, political openness and democratic reforms.

¹¹⁸ Shambaugh: 74.

China and Russia have worked together in security forums such as the SCO and the UN to further their mutual interests, often at the expense of the United States. Each nation sees the other as a useful tool to help counter U.S. hegemony. With strong traditions of authoritarian government, the Chinese government does not have to worry about appearing as legitimate in the eyes of Russia as it might with the democratic world. China has considerable latitude to use soft power in its relationship with Russia.

China and Russia share a similarly cozy relationship that allows Chinese soft power to come into play. China shares a long border with Russia and they have developed mutual business interests in cross-border trade. China and Russia have formed a “strategic partnership” which has been described as a “quasi-alliance.”¹¹⁹ China relies on Russia to provide advanced weapons and they cooperate on joint military technology development. A high note of their burgeoning security relationship came during the exercise “Peace Mission 2005.” China claims that the exercise “merely reflected the common aspirations of the two countries for peace, unity and cooperation, and friendship from generation to generation.”¹²⁰ However, the exercise in fact involved over 10,000 troops staging amphibious landings on the Shandong Peninsula and paratroops drops, widely seen as a signal towards Taiwan and the United States.

The United States generally welcomes China’s active involvement in regional and international forums as a way of encouraging China to act as a “responsible stakeholder” in the world. This activism can hold negative consequences for the United States, however, as China is often active in, and works to shape the agenda in, forums where the United States is not present. As seen above, China wielded its considerable influence within the SCO to work against the U.S. military presence in Central Asia.

China and the United States find themselves working together due to many mutual interests in economic trade and peace within Asia, generating opportunities for each side to wield its soft power to sway the other. However, mutual suspicions and

¹¹⁹ Saunders, 13.

¹²⁰ “China-Russia Military Exercise Concludes,” Xinhua News Agency (August 26, 2005) at www.china.org.cn/english/2005/Aug/139796.htm, accessed May 21, 2007.

power politics by both sides will limit the extent to which each nation's message can penetrate to the people and the elites of the other nation.

While there is considerable evidence that China's soft power star is on the rise, there are also substantial limits to China's ability to appear as a legitimate and responsible actor worthy of leadership in the international community. Chinese economic power brings it great influence, but China's neighbors are beginning to grow wary of that power and the potential rise of a new hegemon. Concerns about inexpensive Chinese labor destroying local manufacturing jobs are not isolated to the nations of the G-8. Such fears have even spread to the developing world.

Chinese crackdowns on the Tiananmen Square protesters and on Falun Gong and other repressive policies at home, such as agreements with leading computer and Internet companies to limit information freedom for the Chinese public, go a long way to limiting China's soft power appeal. China's embrace of unsavory regimes abroad may also carry a backlash by promoting the image of China as more interested in the bottom line than human rights.

While China's economic prowess gives it great sway in the world, it will need to develop appealing cultural values to have truly lasting soft power that can compete with America's enduring soft power. As Singaporean academics Zhao Litao and Tan Soon Heng claim, "while China's long history has left enormous cultural resources, modern China has yet to find a good way to transform them into marketable, appealing cultural products." As evidence, they point to the fact that, "China bought more than 4,000 copyrights from the United States in recent years, but its export of copyrights to the United States over the same period amounted to only 16."¹²¹

China's soft power might be on the rise at the expense of that of the United States, but the decline in U.S. appeal may likely be temporary. It is generally accepted that American cultural values have enduring appeal and that U.S. policies are the cause of the fall of U.S. soft power. China's authoritarian political values may be of little value

¹²¹ Zhao Litao and Tan Soon Heng, "China's Cultural Rise: Visions and Challenges," *China, an International Journal* Vol. 5 No. 1 (March 2007): 103-104.

outside of China, and armed clashes in the Taiwan Straits may bring Chinese soft power tumbling down. As the *Financial Times* pointed out, “It is the Chinese political and social system that worries foreigners. It is much easier to change your policies than to change your political system.”¹²²

Joseph Nye, the progenitor of the term “soft power,” agrees that China’s soft power is constrained,

But just as China's economic and military power is far from matching that of the U.S., China's soft power still has a long way to go. China does not have cultural industries like Hollywood, and its universities are far from the equal of America's. It lacks the many non-governmental organizations that generate much of America's soft power. Politically, China suffers from corruption, inequality, and a lack of democracy, human rights and the rule of law...Nonetheless, although China is far from America's equal in soft power, it would be foolish to ignore the gains it is making...It is time for the U.S. to pay more attention to the balance of soft power in Asia.¹²³

5. Soft Power: A Problem of Mysteries and Open Sources

The question of China’s use of soft power is primarily a mystery of how effective it will be at providing political influence at the expense of the United States, and how long China will be able to maintain its high profile via economic spending. Much of China’s intent and goals can be derived from its public statements and development agreements. China has made it clear that it will have a continued, active presence across the developed world. Specific target countries may vary from time to time, but the overall trend is not in doubt. The mystery remains in how well China will be able to carry out its plans and use its soft power to maintain access to valuable resources and markets abroad and how well it will be able to use its newly-won political influence to its advantage.

The works cited here give evidence that much of the information required to analyze China’s soft power can be pieced together from open sources. Phillip Saunders

¹²² Rachman.

¹²³ Joseph Nye, “The Rise of China’s Soft Power,” *Wall Street Journal Asia*, December 29, 2005.

provides a useful summary of the numerous sources available to indicate China's intent and priorities. Saunders notes the differences between Chinese statements to different audiences to infer the true intent of China's soft power strategy. He shows how public statements usually stress the "win-win and mutually beneficial nature of economic cooperation with other countries and highlight common interests in strengthening economic ties," but that internal writings "tend to focus on intense international competition for resources and markets and the need for the state to play an active role in assisting Chinese companies in this competition."¹²⁴

Saunders also makes a careful tabulation of top Chinese leadership travel abroad, foreign leader travel to China, and patterns of Chinese outbound foreign direct investment and development assistance and Chinese trade patterns as valuable indicators of China's intent and priorities. He notes that official Chinese statistics tend to be inaccurate for a variety of reasons, but by and large, "some important details emerge from an analysis of open source reports."¹²⁵

Understanding China's use of soft power requires little in the way of secret information collected surreptitiously. Open sources provide the vast bulk of the data required to understand where China is wielding its soft power. Much of these data will come from outside official government channels, as journalists and business leaders will often have the most current and up-to-date information. The IC needs to be able to tap into these resources and filter and weave the various information flows to create a coherent and comprehensive picture for policymakers.

E. IMPLICATIONS FOR THE IC

The previous pages have sketched a portrait of China's rise as a mystery about which little is assured. Military growth has been impressive to date, but it may run into a ceiling imposed by difficult sociological, technological, industrial and economic forces. China's future economic growth faces similar perils. The flexing of China's soft power

¹²⁴ Saunders, 18.

¹²⁵ Saunders, 21.

may make China a more cooperative and approachable “responsible stakeholder” but it may also lead to increased conflict over governance and values. With such an abundance of paradoxes and widespread spectrum of possible outcomes, the need for an IC capable of coherently weaving together disparate strands of often loosely-related information becomes paramount.

Puzzles are still important in answering the key questions of China’s fate and its impact on U.S. security. China’s true military capabilities are one of the primary puzzles in need of investigation. The closed nature of China’s policy-making bodies also provides plenty of puzzles that require secrets to answer. An IC geared towards stovepiped expertise to gather secrets to answer puzzles may be appropriate for China.

Yet mysteries are also critical to understanding China. Can China sustain its current military modernizations? Will China overcome the impediments to its continued economic growth? Will China’s influence in the developing world undermine U.S. diplomacy? These and other relevant questions may require a different kind of IC.

Much of the information needed to illuminate these mysteries will not be as concealed as information about the Soviet Union. China is a relatively closed society, and official government information must be taken with a grain of salt. But China’s integration into the world economy makes much more information available, reducing, but by no means eliminating, the need to rely on secret information to make analytical assessments. However, the amount of open information available on China is vast compared to that available about the Soviet Union. The vast volume of open information available poses a different challenge to analysts. In the Cold War, the IC agencies could focus on gathering and piecing together secret information and providing it to policymakers as relatively authoritative answers. Today, especially for issues such as China’s rise, the IC is no longer the sole proprietor of much of the information. There are still valuable secrets about China that the IC must continue to gather, but those secrets must be integrated into the ocean of open source data readily available.

The ocean of open data does not make the IC less valuable, rather it makes the IC more valuable. As Treverton states, the wealth of open information “means that policy-

makers will be more, not less, reliant on information brokers...as their access to information multiplies, their need for processing, if not analysis, will go up.”¹²⁶ Nye further backs up this point, explaining that the combination of secret and open information, “provides a unique resource that policymakers could not obtain merely from reading the journals, assuming they had the time to do so.”¹²⁷ Richard Betts adds that, “the comparative advantage of the intelligence community, when matched against analysts outside government, lies in bringing together secret information with open sources.”¹²⁸

It appears that the proportion of secrets to open data needed may have reversed from the Cold War to today. Back then, the secrets filled in the middle of the puzzle and the open data helped fill in the edges. Today, the reverse appears to be true regarding China. Betts points out, “The more farseeing a project, the less likely secret information is to play a role in the assessment.”¹²⁹

China presents a very different intelligence target than did the Soviet Union, the last power that could challenge the United States militarily, economically and diplomatically. The fate of China’s rise is a mystery that will be greatly illuminated by open source information. China’s military capabilities remain a puzzle that will require secrets to solve, but even there, open information is an invaluable source of illumination. An IC that grew up with a narrow focus on key issues with little collaboration will not be best suited to meeting the challenges of today.

Ironically, the demands of addressing other nation-state intelligence targets may work against the type of intelligence needed to address China. States such as North Korea and Iran present much narrower problems for analysts, with primary focus on nuclear weapons development and proliferation or support for terrorism. These issues require much more focus on technical collection of secrets than surveying the wide

¹²⁶ Treverton, 10.

¹²⁷ Nye, 91.

¹²⁸ Richard Betts, *The Enemies of Intelligence: Knowledge and Power in American National Security*, (New York: Columbia University Press, 2007), 157.

¹²⁹ Betts, 157.

variety open sources available. To be sure, no intelligence problem set lies completely at one end of the puzzles and secrets vs. mysteries and open sources spectrum, but other types of intelligence priorities facing the IC today appear to require different tool sets than the intelligence problems presented by China.

The key to answering China's mysteries will be an IC that breaks from the old norm of narrowly focusing on gathering particular secrets to answer particular puzzles. China's growing interaction with the rest of the world means the IC must be willing and able to collaborate on a wide array of issues. The growing ocean of open sources means the IC must be willing to swim in that sea and fish out the truly important pieces of information available while at the same time maintaining its unique ability to pry out the secrets. However, the IC will no longer have the experts on the key issues as it had in the Cold War, and it must be willing to bring in outside expertise. As the following pages will show, the IC has historically been very slow in changing itself to meet the rapidly changing demands of new target sets.

III. THE NEED FOR REVOLUTIONARY CHANGE

With the IC in the midst of substantial reform, it is important to understand the historical context that has shaped those reform efforts. This chapter begins with a review of historical IC reform efforts to identify consistent trends across six decades of intelligence reform that are still important today. It then looks at how those trends are shaping current reform efforts and how current reform efforts may in fact be ignoring the lessons of the past.

A. HISTORY OF REFORM

Shortly after the smoke cleared at the end of the Second World War, the U.S. Government recognized the need for a new security apparatus to safeguard American interests. The threat posed by nuclear weapons and the increasing awareness of the menace of the Soviet Union convinced America's leaders that change was needed. The Joint Chiefs of Staff told the Secretaries of War and Navy in September 1945 that

Recent developments in the field of new weapons have advanced the question of an efficient intelligence service to a position of importance, vital to the security of the nation in a degree never attained and never contemplated in the past. It is now entirely possible that failure to provide such a system might bring national disaster.¹³⁰

The U.S. Government has been striving to achieve just such an “efficient intelligence service” ever since, beginning with the National Security Act of 1947 and continuing through today. That act established the Central Intelligence Agency (CIA) and it is still one of the primary documents guiding the form and structure of the American intelligence community despite 60 years of reform efforts by the executive and

¹³⁰ Joint Chiefs of Staff to Secretary of War Henry Stimson and Secretary of the Navy James Forrestal, “Establishment of a Central Intelligence Service Upon Liquidation of the OSS,” 19 September 1945, reprinted in Department of State, *Foreign Relations of the United States, 1945-1950, Emergence of the Intelligence Establishment*, 13.

legislative branches. This section traces the broad outlines of those reform efforts, highlighting some of the common themes and their implications for today's intelligence community.

In addition to creating the CIA as an organization separate from the other departments and intelligence services, the National Security Act of 1947 also created the position of the Director of Central Intelligence (DCI). The DCI was dual-hatted as the chief of the CIA and the President's main advisor on intelligence. The powers outlined in the act were fairly weak. The DCI was authorized to "advise" and "make recommendations...for the coordination of intelligence" to the National Security Council on national intelligence matters and "correlate and evaluate" and "provide for the appropriate dissemination" of intelligence within the government.¹³¹ The DCI was authorized to see the intelligence collected and produced by the other intelligence services within the government, but the DCI had no authority or capabilities to collect intelligence on his own. The DCI had the responsibility to coordinate intelligence across the U.S. Government, but he had no authority to control any of the other intelligence services. Thus, the National Security Act of 1947 put into play one of the primary themes of intelligence reform efforts over the next six decades--finding the appropriate balance between centralized responsibilities and authorities, an issue still relevant today.

Almost immediately after the IC was created, efforts were made to reform it. As part of the congressionally-directed Hoover Commission's look at the functioning of the executive branch, a panel led by Ferdinand Eberstadt investigated the IC in 1948. The Eberstadt report found that the CIA was "not now properly organized" and it did not have effective relationships with the rest of the IC. The result was "too many disparate intelligence estimates."¹³² While the report did not make any recommendations about changing the structure of the IC, it did indicate that from the beginning the IC was

¹³¹ U.S. House of Representatives, 80th Congress, "National Security Act of 1947," Public Law 253, July 26, 1947.

¹³² The Committee on the National Security Organization, National Security Organization: "A Report with Recommendations, prepared for the Commission on the Organization of the Executive Branch of the Government," November 15, 1948, as cited by Michael Warner and J. Kenneth McDonald, *US Intelligence Community Reform Studies Since 1947* (Washington, DC: Center for the Study of Intelligence, Central Intelligence Agency, April 2005), 7.

hampered by the lack of coherence between centralized responsibilities and authorities for coordinating national intelligence efforts.

The Eberstadt Report was soon followed by a more influential report authored by future DCI Allen Dulles. The National Security Council commissioned the Dulles-Jackson-Correa Commission to look at the CIA's operations in 1948. The Dulles Report, submitted in January 1949, had similar findings to the Eberstadt report, in that

The principal defect of the Central Intelligence Agency is that its direction, administrative organization and performance do not show sufficient appreciation of the Agency's assigned functions, particularly in the fields of intelligence coordination and the production of intelligence estimates. The result has been that the Central Intelligence Agency has tended to become just one more intelligence agency producing intelligence in competition with older established agencies of the Government departments.¹³³

One of the most important recommendations of the Dulles Report was the formation of an Estimates Division within CIA to produce national-level intelligence estimates in conjunction with the other services. This would raise the CIA's efforts from merely competing with the other services to coordinating the analytical efforts of the other services. This is one of the first things the new DCI, Lt. Gen. Walter Bedell Smith, did when he took office on October 1, 1950. The surprise of the Korean War, followed by the further surprise of Communist China's entry into the war, added to the impetus to reform the IC. The shock of war helped turn many of the Dulles Report's recommendations into reality. This was one of the first successful efforts to enhance the fusion of intelligence across the IC.

Another Congressionally-directed effort at reforming the IC began with the commission created under General Mark Clark in 1954. The Clark Report found many similar problems with overall IC coordination. The DCI's two hats as head of the CIA and IC coordinator meant that one of the two jobs would suffer from relative neglect. In this case, the Clark Report found that then-DCI Allen Dulles focused too heavily on his

¹³³ Intelligence Survey Group, "Report From the Intelligence Survey Group to the National Security Council," reprinted in Department of State, *Foreign Relations of the United States, 1945-1950, Emergence of the Intelligence Establishment*, 358.

role running the CIA at the cost of coordinating the IC. This was a somewhat ironic finding based on the Dulles Report's conclusions a few years earlier, but perhaps understandable given Dulles' background as an Office of Strategic Services operative in World War II.

The Clark Report is significant in that it was the first IC reform effort that looked beyond IC management issues and delved into the coordination and control of intelligence collection operations. This is another area that has since drawn consistent criticism for a lack of centralized control and authority. One result of the Clark Report was that President Eisenhower created the President's Board of Consultants for Foreign Intelligence Activities, which would eventually become today's President's Foreign Intelligence Advisory Board. The board served as an independent advisor to the president on the performance and management of the IC.

The rest of the 1950s and 1960s saw relatively minor efforts within both the executive and legislative branches at reforming the IC. No serious attempts were made at improving coordination of collection or analysis within the IC or fixing the balance between the DCI's responsibilities and authorities.

The next major reform effort came in the 1970s, starting when President Nixon directed the Director of the Office of Management and Budget, James Schlesinger, to review the IC in 1971. Not surprisingly, the group's report focused heavily on resource issues, but its findings were very similar to those of previous commissions. The report found that collection capabilities were "unproductively duplicative," that the IC's expansion over the previous decades had been "largely unplanned and unguided," the DCI's performance was limited by his many roles, and that there was a "lack of institutions governing the community with the authority and responsibility to resolve issues without excessive compromise."¹³⁴ The report contained descriptions of the IC that would sound familiar to anybody familiar with the IC today, with intelligence treated

¹³⁴ James Schlessinger, *A Review of the Intelligence Community* (Washington, DC: Office of Management and Budget, March 10, 1971), 8, 10, 13, 15, as cited by Lt Col John Bansemer, *Intelligence Reform: A Question of Balance* (Maxwell Air Force Base, AL: Air University Press, August 2006), 46 (original report still classified).

as a “free good, so that demand exceeds supply, priorities are not established, the system becomes overloaded and the quality of the output suffers.”¹³⁵

The Schlesinger report had three proposals for revamping the DCI’s role and authority: 1) create a new Director of National Intelligence (DNI) with the majority of collection capabilities placed directly under his control; 2) increase the power of the DCI and split the CIA, with the staff and analytical support going to the DCI and the rest of the agency forming a new organization; 3) create a Coordinator for National Intelligence within the White House to oversee the IC. This was the first call for a new organizational construct that sought to break apart the DCI’s many roles in order to improve coordination of collection and analysis across the IC. These calls would be heard again and again over the next three decades.

The White House adopted a watered-down version of the second option and created the Deputy DCI for Community Affairs, the Intelligence Community Staff to support the DCI, the Assistant Secretary of Defense for Intelligence, merged the Service Cryptologic Elements into the Central Security Service under the National Security Agency, and created the Defense Mapping Agency. The political turmoil of the Vietnam War and Watergate likely reduced the chances for more sweeping changes at that time.

Another chance for substantial reform came with the Church Committee in 1975. Senator Frank Church chaired a committee to investigate allegations of improper domestic and foreign activities by the IC. The committee’s primary purpose was to investigate abuses by the IC, but overall IC management and operations came under review. The committee found that the DCI did not have sufficient authority, his dual roles created a conflict of interest and a span of control that was too broad, there was much waste and duplication, analysis was weak and often subject to agency or department bias, and that the IC was not meeting the needs of the policymakers.¹³⁶

Congress tried to act on the Church Committee’s recommendations. One effort was the National Intelligence Reorganization and Reform Act of 1978, which echoed the

¹³⁵ Schlesinger, 10-12, as cited by Warner and McDonald, 21.

¹³⁶ Bansemer, 50.

Schlesinger Report's call for a DNI. These legislative efforts stalled, but the Church Committee's biggest impact was the creation of Select Committees on Intelligence in both the House of Representatives and the Senate. This began true Congressional oversight of the performance of the IC.

The 1980s and 1990s saw occasional efforts to reform the IC. Two of the more noteworthy efforts were the Aspin-Brown Commission of 1995-96 and the House Permanent Select Committee on Intelligence's 1996 study "IC21: The Intelligence Community in the 21st Century". In 1997 Congress combined elements of both commissions' reports and amended the National Security Act of 1947, restructuring the IC. Congress created Assistant DCI's for collection, administration, and analysis and production, gave the DCI more power (but not total control) over the national intelligence budget and gave the DCI approval authority over appointment of the directors of the Defense Department's National Security Agency, Defense Intelligence Agency and National Reconnaissance Office. This is essentially how the IC stood on September 11, 2001.

B. THE 9/11 COMMISSION AND CALLS FOR CHANGE

The intelligence failure on 9/11 instantly created demands for IC reform. The response was the National Commission on Terrorist Attacks Upon the United States, commonly known as the 9/11 Commission. The commission identified six problems within the IC that led to 9/11 that were also familiar themes since IC reform began in 1948. Among the six problems were "structural barriers to performing joint intelligence work...divided management of national intelligence capabilities...weak capacity to set priorities and move resources... [and] too many jobs [for the DCI]."¹³⁷ The report's most sweeping recommendations for IC reform included creating a DNI with full authority of the national intelligence budget and separating that role from the head of the

¹³⁷ National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report* (Washington, DC: Government Printing Office, August 2004), 408-409.

CIA, and establishing a National Counterterrorism Center (NCTC) and national intelligence centers (NIC) to coordinate and combine collection and analytical efforts on specific issues or regions.

The NICs were inspired by the Goldwater-Nichols Act's (GNA) creation of the modern unified commands in the U.S. military. Under the GNA, the military services organize, train and equip forces and the commander of each unified command has the responsibility and authority for using the forces provided by the services to conduct joint operations within his area of responsibility. Similarly, under the 9/11 Commission's proposal, the existing intelligence agencies would organize, train and equip for collection and analytical capabilities, with the NIC having full responsibility and authority for joint intelligence collection and analysis within their given regional or issue area. Just as GNA was seen as properly fixing the unified commanders' problems of not having the authority to match their responsibility, it was envisioned that the NICs would provide the same fix for the DNI for certain issue areas.

Most of the 9/11 Commission's recommendations were quickly enacted into law in the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA). The IRTPA did create the position of DNI separate from the DCI, but the DNI does not have full budgetary authority as called for by the 9/11 Commission. The Defense Department's allies in the House Armed Services Committee saw to it that the Secretary of Defense would maintain control over the substantial portion of the intelligence budget that resides within the Defense Department.¹³⁸ The IRTPA also created the NCTC and authorized creation of the NICs.

Much of the 9/11 Commission's successes in intelligence reform can be attributed to the shock of the terrorist attacks and the ensuing outcry for reform as well as the close proximity of the report's release with the national elections of 2004. The report's strong reliance on another successful reform effort, the Goldwater-Nichols Act, also lent credibility to the recommendations.

¹³⁸ Gregory Treverton, *The Next Steps in Reshaping Intelligence* (Santa Monica, CA: RAND Corporation, 2005), 4-5.

But the IRTPA likely did not go far enough to give the DNI the true authority he needs to fulfill his responsibilities of coordinating efforts across the IC. The DNI has limited control over budget and manpower resources. The DNI can only reprogram five percent of any agency's budget, and can only move up to 100 people from existing agencies into each new NIC.¹³⁹

The IRTPA set the stage for radical changes within the IC by altering the powers among the players, and in the case of the DNI, creating new players. Real, sustained change needs to be driven by leadership, legislation can usually only get the process rolling. One primary influence on how the IC's new leadership is carrying out its mandate for change is the report from the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, otherwise known as the WMD Commission. The report was submitted on March 31, 2005, only four months after the signing of the IRTPA. The report's timing at the beginning of the ODNI's existence, the high profile of the WMD Commission and the charged political atmosphere in which it was released helped ensure that the report would directly influence efforts to shape the new IC. The WMD Commission's report was characteristic of most previous IC reform studies in its findings,

Our investigation revealed serious shortcomings; specifically, we found inadequate Intelligence Community collaboration and cooperation, analysts who do not understand collection, too much focus on current intelligence, inadequate systematic use of outside experts and open source information...and poor capabilities to exploit fully the available data...In sum, we found that many of the most basic processes and functions for producing accurate and reliable intelligence are broken or underutilized.¹⁴⁰

C. IC PERFORMANCE AGAINST CHINA

The studies cited previously have focused on the IC in general, or on its capabilities against specific targets such as terrorism and weapons of mass destruction. It may be that the elements of the IC that are focused against China are somewhat innocent

¹³⁹ Treverton, *The Next Steps in Reshaping Intelligence*, 5.

¹⁴⁰ WMD Commission, 389.

of the charges levied against the IC as a whole. Perhaps the long continuity of China as a major target within the IC has created a pocket of excellence in spite of the many structural and cultural barriers to effective analysis that are present elsewhere in the IC.

There are some areas where the IC has performed well against China. According to *The New York Times*, U.S. policy makers had ample warning about the Chinese anti-satellite test that destroyed a Chinese weather satellite in January 2007. A senior administration official stated that “We did get warning that the test was being prepared.” Chinese preparations for the 2007 test were detected by U.S. intelligence agencies as early as December 2006. The target of the test was correctly assessed beforehand to be the Feng-Yun-1C weather satellite and the U.S. Air Force was closely tracking the satellite on the day of the test, “checking its location six times that day instead of the normal two.”¹⁴¹

This success may not provide the best indicator of the IC’s overall performance against China, however. An event such as the anti-satellite test represents an intelligence target that is much more of a puzzle than a mystery. These are the intelligence puzzles that the technical intelligence collection agencies in the DoD were designed to uncover in the framework of the Cold War-era structure of the IC. As the previous discussion has noted, however, mysteries are much more important in determining China’s rise.

There is also some evidence that the IC as a whole has weaknesses against China that limit its ability to accurately assess China’s emergence. In the *Bulletin of the Atomic Scientists*, Gregory Kulacki, the manager of the China Project at the Union of Concerned Scientists, catalogued mistakes within several U.S. intelligence public reports on China. The errors “call into question the reliability of the information presented to Congress and to the American public.” He showed how the mistakes resulted from inaccurate translation of original Chinese sources, reliance on misleading Chinese open sources such as tabloid magazines and neglect of valuable Chinese open sources that *can* provide reliable clues to Chinese capabilities and intentions. He cited one particular series of circular reporting where,

¹⁴¹ Michael R. Gordon and David S. Cloud, “U.S. Knew of China’s Missile Test, but Kept Silent,” *The New York Times*, April 22, 2007.

Like a game of telephone gone horribly wrong, the space commission quoted a low-ranking Chinese military officer who had been quoting U.S. sources. In doing so, the commission's report misrepresented America's own estimates of its military weaknesses as original Chinese observations and intentions.¹⁴²

This indicates that the IC still has weaknesses in exploiting the open sources that are required to understand all facets of China's emergence.

The Washington Times has uncovered at least three classified reports that were critical of the IC's ability to provide accurate assessments of China's rising power. The first was a 2000 study led by Andrew Marshall of the DoD's Office of Net Assessment that was critical of the IC's performance against China, finding major "intelligence gaps."¹⁴³

According to the *Times*, the CIA commissioned a study in 2001 at the behest of the Senate Select Committee on Intelligence that found that the IC's judgements were clouded by an "institutional predisposition" to misinterpret intelligence about China, leading analysts to "overreach" in their assessments. According to Senator Richard Shelby of Alabama, then the vice chairman of the Senate Select Committee on Intelligence, the CIA had "not viewed China in a realistic way."¹⁴⁴

The Washington Times also revealed a 2005 study that reached similar conclusions about consistent IC weaknesses against China. The 2005 report, ordered by the National Security Council staff, documented more than a dozen significant Chinese military developments that the IC missed. Examples include a long-range cruise missile, the *Yuan* attack submarine that was not detected by U.S. analysts until photos appeared on the internet, and a warship equipped with stolen Aegis technology. According to the *Times*, another study has been ordered to assess "intelligence lapses on China."¹⁴⁵

¹⁴² Gregory Kulacki, "Lost in Translation," *Bulletin of the Atomic Scientists* Vol. 62 No. 3 (May/June 2006) 34-39.

¹⁴³ Bill Gertz, "Outside Panel Finds CIA Soft on China: Classified Reports Found to be Flawed," *The Washington Times*, July 6, 2001, A1.

¹⁴⁴ *Ibid.*

¹⁴⁵ Bill Gertz, "Analysts Missed Chinese Buildup," *The Washington Times*, June 9, 2005, A1, and Bill Gertz and Rowan Scarborough, "Inside the Ring," *The Washington Times*, June 17, 2005, A6.

The previous passage does not lay particular blame against the elements of the IC that are dedicated against China. It merely points out that those elements are likely susceptible to the same structural and cultural barriers to effective analysis that beset the IC as a whole. The fixes prescribed by the earlier IC studies will likely improve the IC's performance against China as well.

The previous discussion has made it abundantly clear that radical, some would say "revolutionary" change was necessary for the IC.¹⁴⁶ In examining how militaries have responded to revolutions in military affairs (RMAs), it has been noted that revolutions require changes in three key areas: organization, doctrine and technology.¹⁴⁷ New technologies usually give rise to a revolution but they are not enough to sustain it, such as the combination of radio, armor and aircraft that enabled Germany's success early in World War Two. Those technologies would have provided only marginal improvements in Germany's military operations if it were not for the organizational changes of Panzer divisions and innovative doctrinal changes of blitzkrieg. It was the combination of changes in all three fields that made the Wehrmacht so powerful.

The three required changes for an RMA to take place are a useful framework for investigating how well the IC has reformed itself in the face of the need for revolutionary change. For example, technologies to enable IC collaboration are available, but do the IC's organizational setup and doctrinal approach to collection and analysis make the best use of those technologies? The remainder of this thesis uses the framework of organizational, doctrinal and technological change to examine what changes are needed in these three areas to allow the IC to provide comprehensive and insightful intelligence on China to serve U.S. policymakers.

¹⁴⁶ Deborah G. Barger, *Toward a Revolution in Intelligence Affairs* (Santa Monica, CA: RAND Corporation, 2005).

¹⁴⁷ Andrew F. Krepinevich, "Cavalry to Computer: The Pattern of Military Revolutions," *The National Interest* 37 (Fall 1994), 30-42 and William A. Owens, "The American Revolution in Military Affairs," *Joint Forces Quarterly* 10 (Winter 1995-96), 37-38.

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IV. CURRENT TRENDS IN IC REFORM

A. ORGANIZATIONAL CHANGES

Given the WMD Report's significant influence on IC reform efforts, it is prudent to begin with an examination of the report's influence on the organizational aspects of IC reform. President George W. Bush endorsed 70 of the WMD Commission's 74 overall recommendations, giving the DNI the responsibility for implementation of the "vast majority of recommendations."¹⁴⁸ While history has shown that IC reform efforts need strong political impetus to achieve change, it is possible that the WMD Commission's recommendations have had *too* much power at the expense of recommendations presented by the 9/11 Commission.

Statements by the current DNI indicate that he was receptive to many of the 9/11 Commission's recommendations. In an article in the summer 2007 issue of *Foreign Affairs*, DNI Mike McConnell stated that

To capture the benefits of collaboration, a new culture of collaboration must be created for the entire intelligence community without destroying unique perspectives and capabilities. The way to do so would be to follow the model provided by the Goldwater-Nichols reforms of the military in the late 1980s. The Goldwater-Nichols Act created a unified military establishment and, among other things, laid the foundations for a 'joint' military...What Goldwater-Nichols did for the military, IRTPA should provide the means to do for the U.S. intelligence community.¹⁴⁹

One of the key GNA-based reforms proposed within the 9/11 Report was the creation of unified NICs that had the authority to direct intelligence operations across the IC. The IRTPA does "provide the means" to create such organizations, but the ODNI

¹⁴⁸ Office of the Director of National Intelligence, "ODNI Progress Report – WMD Commission Recommendations," July 27, 2006, <http://www.dni.gov/reports/WMDCommissionReport.pdf>, accessed November 13, 2007.

¹⁴⁹ Mike McConnell, "Overhauling Intelligence," *Foreign Affairs* Vol. 86 No. 4 (July/August 2007), 52-53.

has, as of yet, chosen not to implement them. This is one area where the WMD Commission's recommendations may have been too powerful.

One of the key differences between the 9/11 Commission's and WMD Commission's organizational recommendations is the question of how much centralization should take place in intelligence operations. In contrast to the NICs recommended by the 9/11 Commission, the WMD Commission recommended the creation of Mission Managers.

With the WMD Commission's heavy influence on IC reform, it is worth an in-depth look at the WMD Commission's vision for the Mission Manager's role.

As the DNI's point person for individual high-priority subject matter areas, Mission Managers would be responsible for knowing both what the Community knows (and what it does not know) about a particular target, and for developing strategies to optimize the Community's capabilities against that particular target. For any such target—be it a country like China, a nonstate actor like al-Qa'ida, or a subject like “proliferation”—a Mission Manager would be charged with organizing and monitoring the Community's efforts, and serving as the DNI's principal advisor on the subject...With respect to collection, Mission Managers would chair Target Development Boards...the Mission Managers' role would include identifying collection gaps, working with the various collection agencies to fill them, and monitoring the collection organizations' progress in that regard...they would also serve as the DNI's primary tool for focusing the Intelligence Community's analytical attention on strategic threats to national security and optimizing the Community's resources against them. While they would not directly command the analytical cadre, they could—in cases where agency heads were resistant to properly aligning resources or addressing analytic needs—recommend that the DNI's personnel powers be invoked to correct the situation or quickly re-configure the Community to respond to a crisis. Because of their responsibilities for developing a coordinated approach to collection and analytic efforts, we believe that the Mission Managers would also collectively serve as an important device for achieving Community integration over time. Some might suggest that the Mission Manager function will conflict with the role of National Intelligence Officers (NIOs) within the National Intelligence Council, the Community's focal point for long-term, interagency analysis...once an Estimate on a given topic is finished, NIOs move quickly to the next, perhaps not to officially revisit the subject matter for years. They have neither the time nor the authority to craft and implement strategic plans designed to improve the Community's work on a particular issue over time. This, as we see it, will be the Mission Managers' role.¹⁵⁰

¹⁵⁰ *WMD Report*, 317-319.

The lengthy job description makes it clear that the Mission Managers have a heavy load of responsibilities and would be hard-pressed, even with a great staff, to keep on top of every aspect of the mission. This would be especially true for such a vast mission as China. The Mission Managers' inability to directly command the collection functions and analytical cadre also points out that they would have little real authority to match their lofty responsibilities, repeating the mistakes of the past. The WMD Report's proposed solution to interagency intransigence of invoking the DNI's personnel powers to "correct the situation or quickly re-configure the Community to respond to a crisis" would not provide adequate support in a crisis. Crises are the worst time to engage in lengthy political turf-battles. It is somewhat ironic that the WMD Report found the NIOs to have too little time or authority coordinate IC actions on a given mission, when the report's prescription would likely face the same hurdles. Curiously, the WMD Commission also found it worthwhile to point out in the passage above that China would be an obvious candidate to have its own Mission Manager.

For a mission as broad as China, a strong, empowered NIC is likely the best organizational form for coordinating efforts across the entire IC. The NIC would essentially have the same mission that was laid out for the Mission Managers, but would actually have the manpower and authority to carry out the mission.

The WMD Report offered the following justification for using Mission Managers instead of creating NICs,

We are also skeptical more generally about the increasingly popular idea of creating a network of "centers" organized around priority national intelligence problems. While we sympathize with the desire for better coordination that animates these proposals, centers also impose costs that often go unappreciated. As our Iraq case study aptly illustrates, centers run the risk of crowding out competitive analysis, creating new substantive "stovepipes" organized around issues, engendering turf wars over where a given center's mission begins and ends, and creating deeply rooted bureaucracies built around what may be temporary intelligence priorities. In most instances we believe that there are more flexible institutional solutions than centers, such as the national Mission Managers we propose.¹⁵¹

¹⁵¹ *WMD Report*, 328.

Somewhat ironically, the WMD Report did recommend creating a just such a mission-focused center in the National Counterproliferation Center (NCPC).¹⁵² The report attempted to differentiate the role of the NCPC from that of the Mission Managers,

The NCPC we propose would serve as the DNI's Mission Manager on counterproliferation issues: it would not conduct analysis itself, but would instead be responsible for *coordinating* analysis and collection on nuclear, biological, and chemical weapons across the Intelligence Community...the NCPC would *not* contain a large staff of analysts working on proliferation. Rather, the NCPC would coordinate decentralized analytic efforts occurring at various agencies. This would increase the likelihood of competitive analysis of proliferation issues across the Community. In some cases, the NCPC might determine that no part of the Community is addressing a proliferation-related issue sufficiently and designate a small group of resident NCPC analysts drawn from throughout the Community to work on the issue.¹⁵³

The NCPC's proposed benefits to analysis are that by having a small staff of analysts, competitive analysis can flourish across the IC while at the same time analysis can be bolstered on key issues that have lacked appropriate attention. The IC and the nation would be served well by a NIC for China that serves the same functions. Similarly, a NIC for China would likely avoid some of the purported pitfalls in the WMD Report's argument against NICs. China will not be a "temporary intelligence priority" and the nation-state-focused nature of the mission would lessen the extent of "turf wars" over where its mission begins and ends.

Three Mission Managers have been created so far for four nations, one each for Iran and North Korea and one to cover both Cuba and Venezuela. The heads of the NCPC and the National Counterterrorism Center and the National Counterintelligence Executive have also been designated Mission Managers for their respective topics. The ODNI has described the role of the Mission Managers in several press releases:

¹⁵² *WMD Report*, 327.

¹⁵³ *WMD Report*, 328-329.

Mission Managers do not directly manage operations or analysis, but instead lead the Intelligence Community at a strategic level by integrating collection and analysis, identifying and filling gaps in intelligence, and planning and ensuring the implementation of strategies, among other duties.¹⁵⁴

In its May 2006 progress report on implementation of the IRTPA, the ODNI states that it is “instituting similar mission management practices for twelve other key countries and issues” without naming what those countries or issues are.¹⁵⁵ One would hope, based on the importance of China’s rise to U.S. national interests, that one of those “key countries” is China. Implementing “similar mission management practices” for China without creating a strong organization to guide, monitor and push those practices is likely to have limited success in managing IC operations. The individual IC components would have too much leeway to fall back on old practices and preferences.

It is likely that Mission Managers will bring some improvement to IC efforts against their respective target sets. The lack of IC-wide coordination has been well documented. The Mission Managers as described by the WMD Commission and the ODNI, however, will likely face the same issues the DCI has historically faced, with no authority to back up their responsibilities for IC-wide coordination on their issues. The recommended solution to countering an agency’s resistance to proposals is to invoke the “the DNI’s personnel powers...to correct the situation or quickly re-configure the Community to respond to a crisis.” The informal Mission Managers for the above-mentioned “twelve other key countries and issues” would have even less authority to force actions by the different components of the IC.

The IC-wide guidance on mission management practices is also problematic, and may create more problems than it solves. IC Directive (ICD) 900, “Mission Management” was published on December 21, 2006, laying out the roles and

¹⁵⁴ Office of the Director of National Intelligence “Mission Manager for Cuba and Venezuela Announced,” ODNI News Release No. 22-06, November 27, 2006, http://www.dni.gov/press_releases/20061127_release.pdf, accessed November 13, 2007.

¹⁵⁵ Office of the Director of National Intelligence, “Report on the Progress of the Director of National Intelligence in Implementing the ‘Intelligence Reform and Terrorism Prevention Act of 2004,’” May 2006, http://www.dni.gov/reports/CDA_14-25-2004_report.pdf, accessed November 21, 2007.

responsibilities of the IC's elements pertaining to mission management. The key flaw in this ICD and the overall mission management approach is the same that has been laid out in almost every IC reform effort: lack of clear authority. The ICD states, "analytic taskings to the IC from Mission Managers and NIOs...shall be appropriately coordinated with one another before they are issued and should be regarded as *equally authoritative...*" [emphasis added].¹⁵⁶ This appears to be a recipe for incoherence and will work against the IRTPA's efforts to create unity of command within the IC. The ICD also blurs the lines between Mission Managers and NIOs regarding the relationship with policymakers, with the Mission Manager being the primary support to the DNI at policymaking meetings, even though the analytic expertise that may be required would be resident with the NIO.

One other key organizational recommendation proposed by the WMD Commission is the creation of a long-range analysis unit as part of the National Intelligence Council. The WMD Commission provided the following vision for long-term analysis,

We recommend placing this new unit under the National Intelligence Council where analysts would be able to focus on long-term research and underserved strategic threats, away from the demands of current intelligence production. Although some analysts in this new organization would be permanently assigned, at least half—and perhaps a majority—would serve only temporarily and would come from all intelligence agencies, including those with more specialized analysts, such as NGA and NSA...Because we expect the topics tackled by this group to be complex, collaboration with those outside the unit should be pervasive. We envision the analysts located in this unit leading projects that bring in experts from across the Intelligence Community, as well as from outside the sphere of intelligence. This collaboration will enable the Intelligence Community to tackle broad strategic questions that sometimes get missed as many analysts focus on narrow slivers of larger issues...These analysts would come to the office with an understanding of the pulse of current intelligence. Even more important, those same analysts would return to their line units, and the production of timely intelligence, with a greater depth of understanding of their accounts...We hope that this unit would also engage in alternative analysis—and that this would help to foster

¹⁵⁶ ODNI, "Intelligence Community Directive Number 900: Mission Management," December 21, 2006, <http://www.fas.org/irp/dni/icd/index.html>, accessed January 2, 2008, 5.

alternative analysis throughout the Intelligence Community. Moreover, rotations through this unit would foster a greater sense of community among analysts and spur collaboration on other projects as well. Although this strategic analytic unit could be housed in a number of places, we believe that the NIC is best. First, the NIC remains today one of the few places within the Intelligence Community that focuses primarily on long-term, strategic thinking. Second, the NIC is already accustomed to working with analysts across the Community and is therefore likely to be seen as an honest broker—an organization that treats analysts from different agencies equally. Third, the NIC already regularly engages outside experts. Indeed, many National Intelligence Officers spend the bulk of their careers outside the intelligence field.¹⁵⁷

This is exactly the type of strategic, collaborative, open-source driven analysis that is needed for China. The optimal course of action for the IC regarding China would be to combine organizational recommendations from both the 9/11 Commission and the WMD Commission. Create a relatively small, mission-focused center that provides mission management on China as well as long-term strategic analysis and outreach to academic and other open sources. Housing the IC's collection and analytical efforts in one center and empowering it along the lines of the GNA-inspired NICs would prevent the wasted time and effort of inter-agency bureaucratic turf battles. A long-term center focused on China would also serve to bridge the imposed gap between the Mission Managers and the lead analysts on the National Intelligence Council, as described in the WMD Commission's approach. It would be difficult for the Mission Managers to identify IC-wide gaps in analysis and collection without being the IC expert in the field. A National Intelligence Center for China would also provide the competitive analysis and gap identification benefits expected of the NCPC. A long-term National Intelligence Center for China would also alleviate other problems identified in the WMD Report. One such problem is that, "The current collection system has limited ability to engage in long-term, coordinated planning on existing threats."¹⁵⁸ Further,

In many cases today, analysts in the 15 organizations are unaware of similar work being done in other agencies. Although analysts may develop working relationships with counterparts in other organizations, there is no

¹⁵⁷ *WMD Report* 403-405.

¹⁵⁸ *WMD Report*, 356.

formalized process or forum through which to do so. These dysfunctional characteristics of the current system must change; collaboration must replace fragmentation as the analytic community's primary characteristic.¹⁵⁹

A NIC is the best organizational option for enhancing collaboration across the IC, based on historical lessons learned about the need to centralize authorities to match responsibilities. A NIC can have ties to existing IC components to foster collaboration, and the authoritative teeth to force collaboration when required. It can have the long-term look required to do in-depth analysis and serve as a central point of outreach to the academic, business, journalism, think-tank and NGO worlds.

In his work, *Analytic Culture in the U.S. Intelligence Community: An Ethnographic Study*, Dr. Rob Johnston of the CIA's Center for the Study of Intelligence discusses the pros and cons of assembling multi-disciplinary teams of experts for intelligence work.¹⁶⁰ The primary benefit of multi-disciplinary teams is breaking down the biases that can shade analysis when experts view information solely from the perspective of their own particular field. As the previous assessment of China as an intelligence target showed, the issues regarding China are so complex that multi-disciplinary approaches are necessary to fully assess any issue. Dr. Johnston concludes that,

Effective teams require cohesion, formal and informal communication, cooperation, shared mental models, and similar knowledge structures...Without specific processes, organizing principles, and operational structures, interdisciplinary teams will quickly revert to being simply a room full of experts who ultimately drift back to their previous work patterns.¹⁶¹

Leaving analysis on China in the loosely-framed focus of the Mission Manager construct would get the IC nowhere close to achieving the attributes necessary for

¹⁵⁹ WMD Report, 388.

¹⁶⁰ Rob Johnston, *Analytic Culture in the U.S. Intelligence Community: An Ethnographic Study*, (Washington, DC: CIA, Center for the Study of Intelligence, 2005) 61-73.

¹⁶¹ Johnston, 70.

effective analytical teamwork noted by Dr. Johnston. A NIC would be able to provide the form and structure required to create an effective team of interdisciplinary analysts.

Beyond analytical teams, organizational changes can also improve the IC's ability to exploit the vast amounts of open source material that is available. The WMD Commission called for more exploitation of open source material,

We also believe that the need for exploiting open source material is greater now than ever before...Regrettably, the Intelligence Community's open source programs have not expanded commensurate with either the increase in available information or with the growing importance of open source data to today's problems... open source is inadequately used and appreciated...¹⁶²

DNI leadership apparently has taken this to heart. The Deputy DNI for Analysis, Dr. Thomas Fingar, told a recent conference that open source "is absolutely essential...and in order to gain the expertise that we need on the myriad complex subjects that we address, the most important source or sources are those we call open source."¹⁶³

The DNI has taken steps to improve the IC's ability to manage and exploit the expanding volume of open source material available. The DNI issued IC Directive (ICD) 301, "National Open Source Enterprise," on July 11, 2006.¹⁶⁴ The directive states that the IC's "elements will leverage burden sharing, partnerships, and outside capabilities (IC, public, private, other US Government (USG) and foreign partners) to the maximum extent possible" to access and process open source material.¹⁶⁵ The directive also creates an Assistant Deputy DNI for Open Source and establishes the DNI Open Source Center, based on the Foreign Information Broadcast Service. The Open Source Center "serves to advance the IC's exploitation of open source material and nurtures acquisition, procurement, analysis dissemination, and sharing of open source information, products,

¹⁶² *WMD Report*, 378-380.

¹⁶³ ODNI, "Dr. Thomas Fingar Addresses ODNI Open Source Conference," July 17, 2007, http://www.dni.gov/speeches/20070717_speech_3.pdf, accessed January 2, 2008.

¹⁶⁴ ODNI, "Intelligence Community Directive Number 301: National Open Source Enterprise," July 11, 2006, <http://www.fas.org/irp/dni/icd/index.html>, accessed January 2, 2008.

¹⁶⁵ ICD 301, 2.

and services throughout the USG,” and provides open source training and expertise to other elements of the government when required.¹⁶⁶

The directive may elevate the relative importance of open source organizations within the IC, but these moves will remain of limited use unless the IC’s elements recognize the importance of open source material and position themselves to be better able to exploit it. Creating mission managers and open source centers and other organizational changes can only take the IC so far. Doctrinal and technological changes must progress in step with organizational changes in order to achieve real change.

B. DOCTRINAL CHANGES

As the writings on RMA have shown, changes in all three aspects of organization, doctrine and technology are required to effect truly revolutionary change. A National Intelligence Center for China would be useless as a driver of IC-wide collaboration and use of open sources without commensurate changes in the fields of IC doctrine (especially regarding open source analysis and collaboration) and the technologies that enable them.

This thesis uses the official U.S. military definition of joint doctrine: “Fundamental principles that guide the employment of US military forces in coordinated action toward a common objective...It is authoritative but requires judgment in application.”¹⁶⁷ Joint doctrine provides authoritative guidance that unifies the operations of military services with vastly different capabilities and cultures. It provides common ground for the services to work together and helps to work against entrenched service biases. It lays out important concepts that all services must adhere to and work towards, such as command relationships and unity of effort. Such joint doctrine would assist collaboration among the IC’s elements.

Unlike the military, the IC does not have official doctrine documents that govern operations across the agencies. Guidance is currently spelled out in IC Directives signed

¹⁶⁶ ICD 301, 5.

¹⁶⁷ U.S Joint Chiefs of Staff, “Joint Doctrine Definitions,” Joint Electronic Library, http://www.dtic.mil/doctrine/joint_doctrine_definitions.htm, accessed January 2, 2008.

by the DNI. For example, the ODNI published ICD 200, “Management, Integration, and Oversight of Intelligence Community Analysis,” on January 8, 2007. The directive spells out the tenets that should guide analytical activities across the IC, among them,

Collaboration must become the IC norm, not the exception. Technical, policy and cultural impediments to collaboration among analysts and between analysts and collectors must be reduced as much as possible...The IC will seldom have the requisite depth and breadth of expertise to provide all of the insights and detailed answers demanded by our customers. To satisfy their needs, the IC must tap outside expertise and build and expand relationships with non-intelligence government agencies, academic, business, non-governmental organizations (NGOs), and think tank communities, both domestically and internationally.¹⁶⁸

This guidance to collaborate and tap open sources appears to bode well for the IC’s chances of improving its efforts against China. It is unclear whether the ICDs will be able to prevail at forcing true IC cooperation where the previous Director of Central Intelligence Directives apparently failed. What is more important than the words on paper, however, is how willing and receptive the workforce is to embracing and following those words. Steps such as the establishment of standardized “Analysis 101” training for all IC analysts and the creation of a National Intelligence University may be the first steps to achieving the effect of a de facto doctrine of analysis across the IC by giving all analysts a unified approach towards analysis throughout their careers.¹⁶⁹ If this de facto doctrine includes vigorous encouragement of collaboration and open source exploitation, the IC will be much closer to achieving the type of analytical practices necessary to effectively assess China.

Before new doctrinal concepts of sharing and collaboration can be embraced, however, a cultural shift that fosters such moves must take place. Director McConnell

¹⁶⁸ ODNI, “Intelligence Community Directive Number 200: Management, Integration, and Oversight of Intelligence Community Analysis,” January 8, 2007, <http://www.fas.org/irp/dni/icd/index.html>, accessed January 2, 2008

¹⁶⁹ Mary Louise Kelly, “Intelligence Community Unites for ‘Analysis 101’” National Public Radio, May 7, 2007, <http://www.npr.org/templates/story/story.php?storyId=10040625>, accessed January 11, 2008; ODNI, “United States Intelligence Community 100 Day Plan for Integration and Collaboration,” April 11, 2007, 6, <http://www.dni.gov/100-day-plan/100-day-plan.htm>, accessed January 2, 2008

recognizes this: “Old cultures and practices need to be changed to that today’s intelligence community can rapidly exchange information.”¹⁷⁰

Director McConnell’s blueprint for guiding IC reforms is the “100 Day Plan for Integration and Collaboration,” followed by the “500 Day Plan.”¹⁷¹ In these plans, he attempts to spell out specific deliverables for the IC to accomplish. The first task in both plans is to “create a culture of collaboration.” According to the 100 Day Plan, “few transformation efforts have been successful when they did not address culture, attitudes and day-to-day behavior.”¹⁷²

Creating a new culture of collaboration appears to be the intent of many other changes taking place within the IC. In an effort to model the military’s success at achieving jointness in operations, the IC now requires an assignment to an IC agency outside one’s home agency for advancement to senior level positions, just as joint assignments are required for promotion within the military. It is hoped that forcing managers to work outside their traditional stovepipe will make sharing and collaboration between agencies accepted as the preferred way of business.

Another attempt to cultivate a culture of collaboration is the “360 degree” performance review program. Instead of being developed solely by one’s supervisor, performance reviews are to be developed by seniors, peers, subordinates and clients. Director McConnell believes that by changing how members of the IC are evaluated, they will be incentivized towards collaboration. He feels that this in combination with joint assignments is giving him “some tools that will let us do cultural transformation.”¹⁷³

One of the key factors that may most facilitate cultural transformation within the most is the age structure of the IC. The IC is growing considerably younger, and a young staff is less set in old cultural norms and more open to cultural change. Approximately 60 percent of analysts and 40 percent of all workers within the IC have five years of

¹⁷⁰ McConnell, 55.

¹⁷¹ ODNI, “DNI Addresses Project on National Security Reform Conference,” July 26, 2007, http://www.dni.gov/speeches/20070726_speech.pdf, accessed January 2, 2008, 3.

¹⁷² ODNI, “100 Day Plan”, 3.

¹⁷³ ODNI, “DNI Addresses Project on National Security Reform Conference,” 13.

experience or less within the IC.¹⁷⁴ Providing the new workforce with uniform training and guidance that emphasizes concepts such as collaboration and open source exploitation may be the DNI's best bet at achieving the cultural change that he believes is necessary.

One of the DNI's point men in his efforts at achieving a "culture of collaboration" is Mike Wertheimer, the Assistant Deputy DNI for Analytic Transformation and Technology (ADDNI/ATT). Dr. Fingar described Wertheimer as "my philosopher of transformation."¹⁷⁵ His job has been described as working to, "transform the massive intelligence bureaucracy into a collaborative network...introduce technologies that many seasoned analysts neither understand nor trust; and build a cadre of young, ambitious rookies, who just can't believe they're not allowed to check their personal e-mail at work, into the future of the business."¹⁷⁶

One of Wertheimer's key tools for implementing a cultural change towards collaboration is the introduction of new technologies that make collaboration possible. This rounds out the trinity necessary for revolutionary change. Cultural change is not possible when the technological tools for collaboration are not available. Widely employing those tools may make the cultural norms of collaboration more easily accepted when they become a common way of conducting business.

C. TECHNOLOGICAL CHANGES

The IC has often been criticized for not keeping up with new technologies. At one time the IC was the world innovator in information technology, but it has lost its ability to keep pace with the private sector in developing and incorporating the latest in information technologies. The wide availability of publicly-produced cutting-edge information technologies is often cited as a major impediment to the IC as adversaries are able to stay one step ahead of the IC as it lumbers along. This may also prove to be the IC's salvation, as the information technology tools necessary to foster collaboration and

¹⁷⁴ Shane Harris, "The Liberator," *National Journal* Vol. 39 No. 38 (September 22, 2007), 36.

¹⁷⁵ Harris, 36.

¹⁷⁶ Harris, 37.

open source exploitation are widely available and more familiar to the younger workforce. Wertheimer's task has been to exploit these publicly-available technologies for the IC's benefit in the name of transformation.

The IC recently created "Intellipedia," modeled on the popular public website Wikipedia. For the first time, analysts across the IC could collaborate in real-time to increase the IC's accumulated knowledge on key subjects outside of the formal NIE process or other formal working groups. True collaboration can be achieved as any analyst could provide data and argue for or against particular interpretations of its meaning. Unlike Wikipedia, each entry is attributed, adding a measure of legitimacy to the product. The perspective of a well-known expert on a given subject would theoretically be given more weight than that of a brand new analyst speaking from outside the given topic. The new analyst could provide a fresh perspective that might be overlooked by the veteran, mitigating against what Dr. Johnston described as the "paradox of expertise...The performance of experts has been tested against Bayesian probabilities to determine if they are better at making predictions than simple statistical models. Seventy years later, after more than 200 experiments in different domains, it is clear that the answer is no."¹⁷⁷ Whether the information comes from a novice or an expert, at least all analysts were given a platform for collaboration, contributing to the overall analytic integrity of the product.

"A-Space," short for "Analyst Space," the IC's version of the social networking website "MySpace" will be launched in the near future. The goal is to allow analysts to establish informal networks that will facilitate collaboration and the exchange of information. The younger face of the IC will likely be more willing and able to exploit the familiar networking tools to enhance collaboration across the IC.

The IC has even taken steps to use such collaboration tools to create official intelligence products. It is doubtful that the DNI staff would present any page off of Intellipedia as the official community-wide assessment on a given topic. National Intelligence Estimates (NIEs) are still the official vehicle for expressing such views. The

¹⁷⁷ Johnston, 64-66.

NIEs are a throwback to the rigid bureaucratic stovepipes, as they were one of the few methods for bringing together expertise on a given subject from across the IC to develop a coordinated answer on a particular question for policy-makers.

NIEs are still required for presenting a clear answer to policy-makers, Congress or other customers, but it appears that the IC is embracing new forms of collaboration to create NIEs more quickly and make them more encompassing of the vast amounts of information available. One example is the Wiki on Infectious Diseases that the DNI created in cooperation with Mercyhurst College. A class of students pursuing master's degrees in strategic intelligence was designated as the lead in developing a comprehensive assessment of the impact of infectious diseases on U.S. security interests around the globe. The team of 26 students collaborated on the project using widely available "Wiki" collaboration software. The end assessments were based on a comprehensive gathering of relevant data, with over 1,000 pages in the final assessment. The ODNI was apparently pleased with the project, vowing to incorporate the results in an official NIE on the subject, and using the lessons learned from the project to inform future analytical reform efforts.¹⁷⁸

This is an important first step in moving towards an IC based on information age principles of collaboration, but there are some important caveats. One cannot assume that quantity of sources equals quality of analysis. The massive amount of information gathered does not guarantee that the right information was gathered. None of the students were experts in infectious disease, so they had to rely on outside expertise for guidance. Still, the method does show promise for using information age collaborative tools to illuminate mysteries for policy-makers, especially those that cover broad topic areas, such as the future of China's rise and its impact on U.S. security interests.

Technology is also advancing the IC's efforts to exploit the vast amount of open source information available. In 2004, "Argus" was launched, a program that automatically "monitors foreign news media and other open sources for early indications of epidemics other serious biological incidents." It tracks over one million reports a day

¹⁷⁸ National Intelligence Council, "Mercyhurst College Wiki on Global Disease," http://www.dni.gov/nic/research_globaldisease.html, accessed January 2, 2008.

from 3,000 sources in 21 languages.¹⁷⁹ Argus may be expanded in the near future to cover other social disturbances and it or other open source tracking agents could prove to be invaluable in early identification of future environmental and epidemiological crises in China.

Technological improvements that improve collaboration and open source exploitation appear to be the easiest areas for the IC to tackle. The public's demand for ways to sift through and organize the growing volume of available media is paving the way for new technologies that the IC can leverage for its own needs. The workforce is young and is already comfortable with these technologies. Just as in previous RMAs, where organization and doctrine are forced to adapt to the emergence of new technologies, the easy acceptance of familiar technologies by the younger IC workforce may open the door for more substantial cultural and doctrinal changes within the IC that will foster further collaboration and open source exploitation.

¹⁷⁹ McConnell, 57.

V. CONCLUSION

One fact that clearly emerges from the debate about the nature of China's rise is the fact that China's rising power will have important strategic implications for the United States. To achieve an accurate understanding of China's rise, the United States needs an IC that can comprehensively assess it. The first step is to understand the type of intelligence target China that presents. China's rise presents many puzzles to analysts in the United States, but the most important questions are the long-range mysteries. How well can China overcome the growing hurdles to maintain economic, military and diplomatic expansion? None of the big questions regarding China stands in isolation, and collaboration among all elements of the IC as well as the academic, business and NGO worlds will be required to get the true picture of what is happening inside China's vast geographical, political and economic landscapes.

Sixty years of intelligence reform have pointed out consistent shortcomings in the IC's ability to cooperate as a cohesive community. One of the primary lessons learned is that there has consistently been a wide gap between the authorities and responsibilities of the centralized powers within the IC, such as the DCI. Recent investigations such as the 9/11 Commission and the WMD Commission have echoed earlier calls for greater centralization of authority. These calls must be heeded to create an IC that is able to tackle the analytical problems presented by China's rise.

The IC has taken many important steps that will bring it closer to achieving greater collaboration and open source exploitation. These steps, while driven by the need to improve overall intelligence functions, will especially benefit the IC's hefty task of assessing China's rise. The recognition of the need for change is evident. Practically every report and speech released by the DNI endorses the idea of transformation. IC leaders are attempting to embrace the younger generation of analysts and foster change throughout the IC's culture. New technologies are being introduced that further pave the way for greater collaboration. Official policies endorse collaboration and open source

exploitation. New staff organizations are being created that will push the IC towards greater collaboration, open source exploitation and long-range strategic analysis.

Many of these steps fall short, however. The biggest weaknesses lie in organizational and doctrinal change. New staff functions have been created that are intended to drive greater IC cooperation and sharing, in the form of Mission Managers. Their authority does not appear to live up to their weighty responsibilities, however, and the policies that delineate their roles are murky. The China mission set has not even been given a widely-recognized champion within the IC. Creating an empowered National Intelligence Cell for China, as authorized by the IRTPA, that has the authority to direct and coordinate IC operations would be the biggest single move the ODNI could make that would greatly bolster the IC's performance against this complex, strategic target.

There are drawbacks to making such a move, however. The IC is stretched thin in many places, with priorities ranging from global terrorism, the wars in Iraq and Afghanistan, North Korean nuclear development, atrocities in Africa, to name but a few. These many issues could drain the IC's attention and energy away from serious efforts to bolster analysis against China.

There also promise to be turf battles over any further efforts to consolidate and centralize the DNI's authority. The IRTPA authorized the DCI to create NICs, but the fact that none have been created is insightful. Much of that can likely be traced to the unwillingness to engage in tough political turf battles over moves to further centralize authority. The Defense Department and its backers on Capitol Hill probably would be the fiercest opponents to any move to consolidate collection and analytical tasking authority under a NIC, which would take those powers away from the DoD's intelligence agencies such as the NSA and NGA. As Gregory Treverton pointed out, DoD and HASC opposition to efforts to cede Defense's authorities or power to the DNI is one of the main reasons the DNI lacks true budgetary and personnel powers in the first place.

There are also critics within the IC that question recent reforms that move the IC towards collaboration. Intelligence veteran Mark Lowenthal has questioned the direction recent reforms are taking. Lowenthal recently expressed doubts to Mike Wertheimer at a conference on IC transformation,

You are urging this transformation for an end that I do not understand. Collaboration is not an end in itself, to my mind. You want to do this, I think...to make analysis better. What does that mean?...I don't think you have a way of knowing at the end of the day when you get there...I think, unfortunately, a lot of this is pandering to a bunch of commissions that have no understanding of what we do for a living, or the nature of our work, and to a workforce. And I don't think that's a sufficient ground for a transformation. And so I'm left wondering, what's the end state? For what reason?¹⁸⁰

Other critics are more straightforward. One IC employee wrote on an IC blog, "I guarantee Mike Wertheimer will cause people to get killed over this."¹⁸¹

With so much internal and external opposition to recent IC reform efforts, it is worth questioning whether they are valuable or heading in the right direction. An examination of the last effort to reform the IC before the attacks on 9/11 points to some of the problems that current reform efforts face. As noted previously, Congress created four positions in the Office of the DCI in 1997 to centralize and coordinate IC operations. They were the DDCIs for Community Management, Administration, Analysis and Collection. Their goal was improve coordination and collaboration across the IC.

Their first tests came in 1998 with the Indian nuclear tests and the U.S. Embassy bombings in East Africa. In response to the nuclear test, DCI George Tenet stated, "I'm going to take direct charge of how our community collects information, how collection and analysis are lashed together to ensure that the kind of event that occurred here will not occur again."¹⁸² The embassy bombings prompted Tenet to send a memo to all

¹⁸⁰ Harris, 38-39.

¹⁸¹ Harris, 37.

¹⁸² David Kaplan, "Mission Impossible: The Inside Story of How a Band of Reformers Tried—and Failed—to Change America's Spy Agencies," *U.S. News and World Report*, July 25, 2004, http://www.usnews.com/usnews/news/articles/040802/2intell_5.htm, accessed January 13, 2007.

elements of the IC, stating that “We are at war. I want no resources or people spared in this effort, either inside CIA or the community.”¹⁸³

The then-DDCI for Collection, Charlie Allen, began tasking the collection agencies to focus on Al Qaida operations. One staffer within the ODCI stated, “Charlie tasked the hell out of the collection agencies, but Tenet’s memo was completely ignored by the leadership. They knew they didn’t have to respond to the DCI and they didn’t...they had lots of taskings so they can pick and choose what they do.”¹⁸⁴

Other efforts by the DDCIs show the pitfalls that await current reform efforts. They created the Intelligence Community Multi-Intelligence Acquisition Program (ICMAP) as an IC-wide program for highlighting existing intelligence requirements and matching against with the efforts being made by the agencies to fill them. It was essentially a pre-cursor to the current Mission Manager’s target development process. ICMAP was blocked from the beginning. “ICMAP was sabotaged and undercut at every turn,” claims James Simon, the then DDCI for Administration, as the individual agencies resisted efforts to intrude on their stovepipes.¹⁸⁵

The DDCIs created an exercise the focused on getting the individual agencies to collaborate in a virtual environment. The exercise was characterized as a “resounding flop” with one report of the exercise complaining that there were “significant cultural barriers to effective collaboration.” One senior CIA official questioned John Gannon, then the DDCI for Analysis, why the CIA should need to collaborate, wondering “Why can’t we do this ourselves?” Gannon noted later that “The reward systems are all based on protection. You don’t come into work saying how can I share better today.” Gannon noted that regarding collaboration, the CIA “was a real dinosaur.”¹⁸⁶

As with previous efforts to reform the IC, the DDCIs lacked the real authority to carry out their responsibilities of generating collaboration and cooperation among the IC.

¹⁸³ Kaplan.

¹⁸⁴ Kaplan.

¹⁸⁵ Kaplan.

¹⁸⁶ Kaplan.

Former DCI Porter Goss called the DDCI experiment a “brilliant fix that didn’t work.” Then DDCI for Administration Simon argued that, “Congress put us in an untenable situation. Being clever can only take you so far when you lack resources,” pointing out that the DDCIs lacked the absolutely essential resources of control of budget and personnel.¹⁸⁷ These are the same issues that Mission Managers will face under the current organization of the IC, where they have unclear and divided authorities over the individual components of the IC. There might be cultural, doctrinal and technological moves in the right direction, but more organizational changes must be made to get the IC to achieve revolutionary change.

Like Lucien Pye’s earlier description of the Chinese, the IC may also “have a great tradition of muddling through.” The traditional IC structure, doctrines, technologies and culture achieved great successes against the Soviet Union and will continue to provide access to important secrets and piece together dark puzzles. With such strategic issues as the United States’ standing in the world at stake, however, acceptance of such “muddling through” may harbor dangers that outweigh the perceived costs of moving towards a more collaborative, open IC.

The National Intelligence Council has characterized China’s rise as the key force shaping the future geopolitical landscape,

The likely emergence of China and India as new major global players—similar to the rise of Germany in the 19th century and the United States in the early 20th century—will transform the geopolitical landscape, with impacts potentially as dramatic as those of the previous two centuries...Yet how China and India exercise their growing power and whether they relate cooperatively or competitively to other powers in the international system are key uncertainties.¹⁸⁸

In response to a previous tectonic shift in world affairs, the onset of the Cold War, the United States quickly recognized the threat and took bold moves to create a national security framework to protect and advance U.S. interests. Sweeping organizational

¹⁸⁷ Kaplan.

¹⁸⁸ National Intelligence Council, *Mapping the Global Future: Report of the National Intelligence Council’s 2020 Project* (Washington, D.C.: Government Printing Office, December 2004), 47.

changes were made, with the CIA, National Security Council and Department of Defense being created. Old barriers and stovepipes were broken down, as two traditional bureaucratic competitors, the War Department and the Navy Department, were merged into one new uberbureaucracy.

The government proved itself to have the foresight and leadership to force such sweeping changes and carry the related costs. Equally momentous changes at the dawn of this new era called for similarly bold changes to the U.S. national security apparatus. Most of the required changes have already taken place. There is a DNI with some real authority and budgetary and personnel powers. The DNI is enacting doctrinal, cultural and technological changes that should improve how the IC operates across the board. The required changes that need to be made, such as creating empowered National Intelligence Centers, carry miniscule costs compared to those of the National Security Act in 1947, yet those small organizational changes may prove to be all-important in the DNI's ability to forge an organization that can overcome the IC's long-noted divide between having responsibilities to carry out a task and the real authority to make it happen.

LIST OF REFERENCES

- Allen, Kenneth W. "PLA Air Force Operations and Modernization." In *People's Liberation Army After Next*, edited by Susan M. Puska, 189-254. Carlisle PA: Strategic Studies Institute, 2000.
- Bansemer, John. *Intelligence Reform: A Question of Balance*. Maxwell Air Force Base, AL: Air University Press, 2006.
- Barger Deborah G. *Toward a Revolution in Intelligence Affairs*. Santa Monica, CA: RAND Corporation, 2005.
- Bernstein, Richard and Ross Munro. "China I: The Coming Conflict with America." *Foreign Affairs* Vol.72 No.2 (March-April 1997): 18-37.
- Betts, Richard. *The Enemies of Intelligence: Knowledge and Power in American National Security*. New York: Columbia University Press, 2007.
- Bijian, Zheng. "China's 'Peaceful Rise' to Great Power Status." *Foreign Affairs* Vol. 84 No. 5 (September-October 2005): 18-24.
- Blasko, Dennis. *The Chinese Army Today: Tradition and Transformation for the 21st Century*. London: Routledge, 2006.
- Christensen, Thomas J. "Posing Problems Without Catching up: China's Rise and Challenges for U.S. Security Policy." *International Security* Vol. 25, No. 4 (Spring 2001): 5-40.
- Cole, Bernard. *The Great Wall at Sea: China's Navy Enters the Twenty-First Century*. Annapolis, MD: Naval Institute Press, 2001.
- Cole, Bernard and Paul Godwin. "Advanced Military Technology and the PLA: Priorities and Capabilities for the 21st Century." In *The Chinese Armed Forces in the 21st Century*, edited by Larry Wortzel, 159-209. Carlisle, PA: Strategic Studies Institute, 1999.
- Crane, Keith, Roger Cliff, Evan Medeiros, James Mulvenon, and William Overholt. *Modernizing China's Military: Opportunities and Constraints*. Santa Monica, CA: RAND Corporation, 2005.
- Deng, Yong and Thomas G. Moore. "China Views Globalization: Toward a New Great-Power Politics?" *The Washington Quarterly* Vol. 27, No. 3 (2004): 117-136.

- Dollar, David. "China's Economic Problems (and Ours)." *The Milken Institute Review* (Third Quarter, 2005).
- Economist.com, "China lays on the charm." November 8, 2006, accessed via Lexis-Nexis April 4, 2007.
- Economy, Elizabeth C. "The Great Leap Backward? The Costs of China's Environmental Crisis." *Foreign Affairs* Vol. 86 No. 5 (September/October 2007): 38-59.
- _____. *The River Runs Black*. New York: Cornell University Press, 2004.
- Fessenden, Helen. "The Limits of Intelligence Reform." *Foreign Affairs* Vol. 84 No. 6 (November-December 2005): 106-120.
- French, Howard and Lydia Polgreen. "China, Filling a Void, Drills for Riches in Chad." *New York Times*, August 13, 2007.
- _____. "China's Aid in Africa Carries a Price Tag." *New York Times*, August 21, 2007.
- Friedberg, Aaron L. "11 September and the Future of Sino-American Relations." *Survival* Vol. 44 No.1 (Spring 2002): 33-50.
- Gallagher, Mary. "Reform and Openness: Why China's Economic Reforms Have Delayed Democracy." *World Politics* 54 (April 2002): 338-372.
- Gertz, Bill. "Analysts Missed Chinese Buildup." *The Washington Times*, June 9, 2005, A1.
- _____. "Outside Panel Finds CIA Soft on China: Classified Reports Found to be Flawed," *The Washington Times*, July 6, 2001, A1.
- Gertz, Bill and Rowan Scarborough. "Inside the Ring," *The Washington Times*, June 17, 2005, A6.
- Goldstein, Avery. "The Diplomatic Face of China's Grand Strategy: A Rising Power's Emerging Choice." *The China Quarterly* No. 168 (December, 2001): 835-864.
- Guidi, Chen and Wu Chuntao. *Will The Boat Sink the Water? The Life of China's Peasants*. New York: Public Affairs, 2006.
- Guo, Sujian. "The Party-State Relationship in Post-Mao China." *China Report: A Journal of East Asian Studies* Vol. 37 No. 3 (2001): 301-315.

- Hamilton, Lee. "Challenges for Intelligence in American Democracy." Remarks at the International Spy Museum Exhibit. May 5, 2004. http://www.wilsoncenter.org/about/director/docs/Hamilton_intelamerdem.doc, accessed May 14, 2007.
- Harris, Shane. "The Liberator." *National Journal* Vol. 39 No. 38 (September 22, 2007): 34-39.
- Hui-wen, Jen. "China Establishes Soft Power Development as Strategic Mission." *Hong Kong Economic Journal*, March 30, 2007, as translated by Opensource.gov, accessed April 12, 2007.
- Information Office of the State Council of the People's Republic of China. "China's National Defense in 2006," [http://english.peopledaily.com.cn/whitepaper/defense2006/defense2006\(1\).html](http://english.peopledaily.com.cn/whitepaper/defense2006/defense2006(1).html), accessed October 23, 2007.
- _____. "China's National Defense in 2002," <http://english.people.com.cn/features/ndpaper2002/nd.html>, accessed October 30, 2007.
- Johnston, Rob. *Analytic Culture in the U.S. Intelligence Community: An Ethnographic Study*. Washington, DC: Center for the Study of Intelligence, Central Intelligence Agency, 2005.
- Kaplan, David. "Mission Impossible: The Inside Story of How a Band of Reformers Tried—and Failed—to Change America's Spy Agencies." *U.S. News and World Report*, July 25, 2004, http://www.usnews.com/usnews/news/articles/040802/2intell_5.htm, accessed January 13, 2007.
- Kaplan, Robert. "How We Would Fight China," *The Atlantic Monthly* (June 2005): 49-64.
- Kelly, Mary Louise. "Intelligence Community Unites for 'Analysis 101'" National Public Radio, May 7, 2007, <http://www.npr.org/templates/story/story.php?storyId=10040625>, accessed January 11, 2008.
- Krepinevich, Andrew F. "Cavalry to Computer: The Pattern of Military Revolutions." *The National Interest* 37 (Fall 1994): 30-42.
- Kulacki, Gregory. "Lost in Translation." *Bulletin of the Atomic Scientists* Vol. 62 No. 3 (May/June 2006): 34-39.

- Kurlantzick, Joshua. "Beijing's Safari." *Carnegie Endowment Policy Outlook* No. 29 Is. 3 (November 2006),
<http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=18833&prog=zch>, accessed September 18, 2007.
- _____. *China's Charm: Implications of Chinese Soft Power*. Washington, DC: Carnegie Endowment for International Peace, June 2006.
- Lieberthal, Kenneth. *Governing China: From Revolution Through Reform*. New York: W.W. Norton, 2004.
- Litao, Zhao and Tan Soon Heng. "China's Cultural Rise: Visions and Challenges." *China, an International Journal* Vol. 5 No. 1 (March 2007).
- Lu, Xiaobo. "Booty Socialism, Bureaupreneurs, and the State in Transition: Organizational Corruption in China." *Comparative Politics* Vol. 32 No. 3 (2000): 273-294.
- McConnell, Mike. "Overhauling Intelligence." *Foreign Affairs* Vol. 86 No. 4 (July/August 2007): 49-54.
- Medeiros, Evan and Taylor Fravel. "China's New Diplomacy." *Foreign Affairs* Vol. 82 No. 6 (November-December 2003): 22-35.
- Morrison, Wayne. "China's Economic Conditions," Congressional Research Service, August 9, 2007.
- Moss, Todd and Sarah Rose. *China ExIm Bank and Africa: New Lending, New Challenges*. Washington, DC: Center for Global Development, November 2006.
- Mulvenon, James. "So Crooked They Have to Screw Their Pants On: New Trends in Chinese Military Corruption." *Chinese Leadership Monitor* 19 (Fall 2006).
- National Commission on Terrorist Attacks Upon the United States. *The 9/11 Commission Report*. Washington, DC: Government Printing Office, 2004.
- National Intelligence Council. "Mapping the Global Future: Report of the National Intelligence Council's 2020 Project." Washington, D.C.: Government Printing Office, December 2004.
- _____. "Mercyhurst College Wiki on Global Disease."
http://www.dni.gov/nic/research_globaldisease.html, accessed January 2, 2008.
- Naughton, Barry. *The Chinese Economy: Transitions and Growth*. Cambridge, MA: MIT Press, 2007.

- Nye, Joseph S. "Peering into the Future." *Foreign Affairs* Vol. 77 No. 4 (July/August 1994): 82-93.
- _____. "The Rise of China's Soft Power." *Wall Street Journal Asia*, December 29, 2005.
- _____. "Soft Power." *Foreign Policy* 80 (Autumn 1990): 153-172.
- Odom, William. *Fixing Intelligence*. New Haven, CT: Yale University Press, 2004.
- Office of the Director of National Intelligence. "DNI Addresses Project on National Security Reform Conference," July 26, 2007, http://www.dni.gov/speeches/20070726_speech.pdf, accessed January 2, 2008.
- _____. "Dr. Thomas Fingar Addresses ODNI Open Source Conference," July 17, 2007, http://www.dni.gov/speeches/20070717_speech_3.pdf, accessed January 2, 2008.
- _____. "Intelligence Community Directive Number 200: Management, Integration, and Oversight of Intelligence Community Analysis." January 8, 2007, <http://www.fas.org/irp/dni/icd/index.html>, accessed January 2, 2008.
- _____. "Intelligence Community Directive Number 301: National Open Source Enterprise." July 11, 2006, <http://www.fas.org/irp/dni/icd/index.html>, accessed January 2, 2008.
- _____. "Intelligence Community Directive Number 900: Mission Management." December 21, 2006, <http://www.fas.org/irp/dni/icd/index.html>, accessed January 2, 2008.
- _____. "Mission Manager for Cuba and Venezuela Announced." *ODNI News Release No. 22-06*. November 27, 2006, http://www.dni.gov/press_releases/20061127_release.pdf, accessed November 13, 2007.
- _____. "ODNI Progress Report – WMD Commission Recommendations." July 27, 2006, <http://www.dni.gov/reports/WMDCommissionReport.pdf>, accessed November 13, 2007.
- _____. "Report on the Progress of the Director of National Intelligence in Implementing the 'Intelligence Reform and Terrorism Prevention Act of 2004.'" May 2006, http://www.dni.gov/reports/CDA_14-25-2004_report.pdf, accessed November 21, 2007.
- _____. "United States Intelligence Community 100 Day Plan for Integration and Collaboration." April 11, 2007, <http://www.dni.gov/100-day-plan/100-day-plan.htm>, accessed January 2, 2008.

- Owens, William A. "The American Revolution in Military Affairs." *Joint Forces Quarterly* 10 (Winter 1995-96): 37-38.
- Pan, Esther. "China, Africa and Oil." *Council on Foreign Relations Backgrounder* 26 (January 2007).
- Pei, Minxin. "China is Stagnating In Its 'Trapped Transition.'" *Financial Times*, February 24, 2006.
- _____. "China's Changing of the Guard: Contradictory Trends and Confusing Signals." *Journal of Democracy* Vol. 14 No. 1 (January 2003): 73-81.
- _____. *China's Trapped Transition: The Limits of Developmental Autocracy*. Boston, MA: Harvard University Press, 2006.
- Pillsbury, Michael. *An Assessment of China's Anti-Satellite and Space Warfare Programs, Policies and Doctrines*. Washington, D.C.: U.S.-China Economic and Security Review Commission, January 19, 2007.
- Pye, Lucian. "An Overview of 50 Years of the People's Republic of China: Some Progress, but Big Problems Remain." *The China Quarterly* 159, Special Issue (September 1999): 569-579.
- Rachman, Gideon. "The Hard Evidence That China's Soft Power Policy is Working." *Financial Times*, February 20, 2007.
- Ross, Robert. "China II: Beijing as a Conservative Power." *Foreign Affairs* Vol.76 No.2 (March-April 1997): 33-44.
- Saunders, Phillip. *China's Global Activism*. Washington, DC: National Defense University Press, 2006.
- Segal, Adam. "Practical Engagement: Drawing a Fine Line for U.S.-China Trade." *The Washington Quarterly* Vol. 27, No. 3 (2004): 157-173.
- Sevastopulo, Demetri. "Chinese military hacked into Pentagon." *Financial Times*, September 3, 2007.
- Shambaugh, David. "China Engages Asia." *International Security* Vol. 29 No. 3 (Winter 2004/05): 64-99.
- _____. "China's Military Views the World." *International Security* Vol.26 No.3 (Winter 1999-2000): 104-132.
- _____. *Modernizing China's Military: Progress, Problems and Prospects*. Berkeley, CA: University of California Press, 2002).

- Thomas, Timothy L. *Dragon Bytes: Chinese Information War Theory and Practice*. Fort Leavenworth, KA: Foreign Military Studies Office: 2004.
- Treverton Gregory. *The Next Steps in Reshaping Intelligence*. Santa Monica, CA: RAND Corporation, 2005.
- _____. *Reshaping National Intelligence in an Age of Information*. Cambridge, UK: Cambridge University Press, 2001.
- U.S. Department of Defense. *2006 Quadrennial Defense Review Report*. February 6, 2006.
- U.S. Department of State. *Foreign Relations of the United States, 1945–1950, Emergence of the Intelligence Establishment*. Washington, DC: Government Printing Office, 1996.
- U.S. House of Representatives, 80th Congress. “National Security Act of 1947.” Public Law 253, July 26, 1947.
- U.S. Joint Chiefs of Staff, “Joint Doctrine Definitions.” *Joint Electronic Library*, http://www.dtic.mil/doctrine/joint_doctrine_definitions.htm, accessed January 2, 2008.
- Warner, Michael and J. Kenneth McDonald. *US Intelligence Community Reform Studies Since 1947*. Washington, DC: Center for the Study of Intelligence, Central Intelligence Agency, 2005.
- Weiguang, Shen. *World War, the Third World War--Total Information Warfare*. Beijing, China: Xinhua Publishing House, 2000. Translated by OpenSource.gov accessed October 25, 2007.
- Wright, Teresa. “Disincentives for Democratic Change in China.” *Asia Pacific Issues* 82 (February 2007).
- Xinhua News Agency. “China-Russia Military Exercise Concludes,” August 26, 2005, www.china.org.cn/english/2005/Aug/139796.htm, accessed May 21, 2007.
- _____. “The Essence of China’s Peaceful Development is the Great Rejuvenation of the Chinese Civilization.” *BBC Worldwide Monitoring Service*, April 9, 2006.
- Zoellick, Robert. “Wither China: From Membership to Responsibility.” Remarks to the National Committee on US-China Relations, New York, September 21, 2005.
- Zweig, David and Bi Jianhai. “China’s Global Hunt for Energy.” *Foreign Affairs* Vol. 84 No. 5 (September-October 2005): 25-38.

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